

35	40	45
Cys	Thr Arg Ser Ser Pro Ser Ser Cys Trp Thr Gly Thr Leu Leu Gln	
50	55	60
Ala Val Ser Ser Val Gln Val Leu Ser Phe Cys Leu Gln Lys Val Cys		
65	70	75
Ser Ile Trp Cys Ser Cys Leu Met Pro His Thr Gly Asp Ala Pro		
85	90	95

<210> 3183

<211> 1457

<212> DNA

<213> Homo sapiens

<400> 3183

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 <211> 140
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala Gln
 50 55 60
 Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys Asn
 65 70 75 80
 Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala Gln
 85 90 95
 Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro Cys
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 Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr
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<210> 3185
 <211> 1433
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

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									20					30	
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
									35					45	
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
									50					60	
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
									65					80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

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Val Cys Pro Arg Thr Gln Phe Ser Thr Gly Leu Gly Thr Val Val Cys		
100	105	110

<210> 3187

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3187

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<210> 3188

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3188

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Thr Pro Gly Leu Lys Trp Ser Ser Arg Leu Gly Leu Leu Ser Ser Trp
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Glu Val Val Leu Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu
35 40 45
Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg

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50	55	60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser		
65	70	75
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu		
85	90	95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr		
100	105	110
Leu Leu Gly Lys Pro Leu Leu Gly		
115	120	
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<213> Homo sapiens		
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120		
gactcccttt ctgggccagt gctgccctgc tttctctgtc tcttcaggg tgtgctgtcc		
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln		
20	25	30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu		
35	40	45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met		
50	55	60
His Gly Ile Asp Pro Val Val Leu Val Met Val Gly Met Val Met		
65	70	75
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile		
85	90	95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile		
100	105	110

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<211> 266

<212> DNA

<213> Homo sapiens

<400> 3191

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aacagcagga caatccacac ttccgtagcc tcctggggtc ggccgcccag ccagccccggg
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tacagaaaatt catctcccaa aaagcg
266

<210> 3192

<211> 84

<212> PRT

<213> Homo sapiens

<400> 3192

Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro
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Cys Asn Gly Cys Trp Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp
20 25 30
Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
35 40 45
Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
50 55 60
Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
65 70 75 80
Pro Ser Ala Ser

<210> 3193

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3193

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<210> 3194
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3194
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 Asn Tyr Cys Leu Pro Tyr Val Val Pro Val Gly Thr Pro Gly Ala Ala
 35 40 45
 Gly Leu Val Ile Pro Leu Phe Pro Cys Arg Pro Arg Phe Thr Tyr Phe
 50 55 60
 Pro Phe Ser Leu Gly His Arg Ser Cys Ile Gly Gln Gln Phe Ala Gln
 65 70 75 80
 Met Glu Val Lys Val Val Met Ala Lys Leu Leu Gln Arg Leu Glu Phe
 85 90 95
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 Lys Pro Leu Asp
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<210> 3195
 <211> 987
 <212> DNA
 <213> Homo sapiens

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<210> 3196
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<212> PRT
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<400> 3196
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 35 40 45
 Gly Gly Gln Asp Gly Ser Gln Arg Ser Ser Ile His Phe Glu Thr Glu
 50 55 60
 Glu Ala Asn Arg Ser Phe Leu Ser Gly Ile Lys Thr Ile Leu Lys Lys
 65 70 75 80
 Ser Pro Glu Pro Lys Glu Asp Pro Ala His Leu Ser Asp Ser Ser Ser
 85 90 95
 Ser Ser Gly Ser Ile Val Ser Phe Lys Ser Ala Asp Ser Ile Lys Ser
 100 105 110
 Arg Pro Gly Ile Pro Arg Leu Ala Gly Asp Gly Glu Arg Thr Ser
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 Ser Ile Met Lys Lys Tyr Leu Gln Lys
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3900
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<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198
 Met Ala Thr Leu Asp Arg Lys Val Pro Ser Pro Glu Ala Phe Leu Gly
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 Lys Pro Trp Ser Ser Trp Ile Asp Ala Ala Lys Leu His Cys Ser Asp
 20 25 30
 Asn Val Asp Leu Glu Glu Ala Gly Lys Glu Gly Gly Lys Ser Arg Glu
 35 40 45
 Val Met Arg Leu Asn Lys Glu Asp Met His Leu Phe Gly His Tyr Pro
 50 55 60
 Ala His Asp Asp Phe Tyr Leu Val Val Cys Ser Ala Cys Asn Gln Val
 65 70 75 80
 Val Lys Pro Gln Val Phe Gln Ser His Cys Glu Arg Arg His Gly Ser
 85 90 95
 Met Cys Arg Pro Ser Pro Ser Pro Val Ser Pro Ala Ser Asn Pro Arg
 100 105 110
 Thr Ser Leu Val Gln Val Lys Thr Lys Ala Cys Leu Ser Gly His His
 115 120 125
 Ser Ala Ser Ser Thr Ser Lys Pro Phe Lys Thr Pro Lys Asp Asn Leu
 130 135 140
 Leu Thr Ser Ser Ser Lys Gln His Thr Val Phe Pro Ala Lys Gly Ser
 145 150 155 160
 Arg Asp Lys Pro Cys Val Pro Val Pro Val Val Ser Leu Glu Lys Ile
 165 170 175
 Pro Asn Leu Val Lys Ala Asp Gly Ala Asn Val Lys Met Asn Ser Thr
 180 185 190
 Thr Thr Thr Ala Val Ser Ala Ser Pro Thr Ser Ser Ser Ala Val Ser

195	200	205
Thr Pro Pro Leu Ile Lys Pro Val Leu Met Ser Lys Ser Val Pro Pro		
210	215	220
Ser Pro Glu Lys Ile Leu Asn Gly Lys Gly Ile Leu Pro Thr Thr Ile		
225	230	235
Asp Lys Lys His Gln Asn Gly Thr Lys Asn Ser Asn Lys Pro Tyr Arg		
245	250	255
Arg Leu Ser Glu Arg Glu Phe Asp Pro Asn Lys His Cys Gly Val Leu		
260	265	270
Asp Pro Glu Thr Lys Lys Pro Cys Thr Arg Ser Leu Thr Cys Lys Thr		
275	280	285
His Ser Leu Ser His Arg Arg Ala Val Pro Gly Arg Lys Lys Gln Phe		
290	295	300
Asp Leu Leu Leu Ala Glu His Lys Ala Lys Ser Arg Glu Lys Glu Val		
305	310	315
Lys Asp Lys Glu His Leu Leu Thr Ser Thr Arg Glu Ile Leu Pro Ser		
325	330	335
Gln Ser Gly Pro Ala Gln Asp Ser Leu Leu Gly Ser Ser Gly Ser Ser		
340	345	350
Gly Pro Glu Pro Lys Val Ala Ser Pro Ala Lys Ser Arg Pro Pro Asn		
355	360	365
Ser Val Leu Pro Arg Pro Ser Ser Ala Asn Ser Ile Ser Ser Ser Thr		
370	375	380
Ser Ser Asn His Ser Gly His Thr Pro Glu Pro Pro Leu Pro Pro Val		
385	390	395
Gly Gly Asp Leu Ala Ser Arg Leu Ser Ser Asp Glu Gly Glu Met Asp		
405	410	415
Gly Ala Asp Glu Ser Glu Lys Leu Asp Cys Gln Phe Ser Thr His His		
420	425	430
Pro Arg Pro Leu Ala Phe Cys Ser Phe Gly Ser Arg Leu Met Gly Arg		
435	440	445
Gly Tyr Tyr Val Phe Asp Arg Arg Trp Asp Arg Phe Arg Phe Ala Leu		
450	455	460
Asn Ser Met Val Glu Lys His Leu Asn Ser Gln Met Trp Lys Lys Ile		
465	470	475
Pro Pro Ala Ala Asp Ser Pro Met Pro Ser Pro Ala Ala His Ile Thr		
485	490	495
Thr Pro Val Pro Ala Ser Val Leu Gln Pro Phe Ser Asn Pro Ser Ala		
500	505	510
Val Tyr Leu Pro Ser Ala Pro Ile Ser Ser Arg Leu Thr Ser Ser Tyr		
515	520	525
Ile Met Thr Ser Ala Met Leu Ser Asp Ala Ala Phe Val Thr Ser Pro		
530	535	540
Asp Pro Ser Ala Leu Met Ser His Thr Thr Ala Phe Pro His Val Ala		
545	550	555
Ala Thr Leu Ser Ile Met Asp Ser Thr Phe Lys Ala Pro Ser Ala Val		
565	570	575
Ser Pro Ile Pro Ala Val Ile Pro Ser Pro Ser His Lys Pro Ser Lys		
580	585	590
Thr Lys Thr Ser Lys Ser Ser Lys Val Lys Asp Leu Ser Thr Arg Ser		
595	600	605
Asp Glu Ser Pro Ser Asn Lys Lys Arg Lys Pro Gln Ser Ser Thr Ser		
610	615	620
Ser Ser Ser Ser Ser Ser Ser Ser Leu Gln Thr Ser Leu Ser Ser		

625	630	635	640
Pro Leu Ser Gly Pro His Lys Lys Asn Cys Val Leu Asn Ala Ser Ser			
645	650	655	
Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val			
660	665	670	
His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro			
675	680	685	
Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln			
690	695	700	
Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro			
705	710	715	720
Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala			
725	730	735	
Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg			
740	745	750	
Lys Asn Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro			
755	760	765	
Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro			
770	775	780	
Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn			
785	790	795	800
Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro			
805	810	815	
Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu			
820	825	830	
Pro			

<210> 3199
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3199
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120
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180
aggaaccgca aggccccaaa gagagtgtca cagccctggc tttagggagct cctaggtctg
240
ggctgcccga agagcaaggg ctcttccttc ctttttctt ttctctttct tgctacctgc
300
aacatggcga gcaaggggca tgtctcagcc ctgtttgtga tacagctctt tttagccctgc
360
catccagtgg gtccctgagtt cttgtccggc aaccaggaag aatgaggtaa ccagacaagt
420
gttagagtgc caagacaaag aggagcttta ctgagtgaca atagctcaga ggaggccctg
480
gagagggcag ttccctacta cagctggtca tccgacgtct gctcagctct ggctgagcct
540
ggggcttctg tcagcctcag agagggggaa gttcatgctg actggtccat gggcggccat
600

gggcaggccc agaaaaggca acacaagttc gcactccagt ccacggcact gacagcctgg
 660
 cccccagcct tcagggcctc cctggcctga aggtgggcct caccaggac tcacccctt
 720
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 777

<210> 3200
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3200
Met Leu Gln Val Ala Arg Arg Arg Lys Glu Arg Arg Lys Glu Glu Pro
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Leu Leu Phe Gly Gln Pro Arg Pro Arg Ser Ser Leu Ser Gln Gly Cys
 20 25 30
Asp Thr Leu Phe Gly Ala Leu Arg Phe Leu Ala Ser Pro Ser Phe Trp
 35 40 45
Val Ser Pro Arg Ser Pro Val Pro Ala Val Gly Ala Ala Cys Cys Met
 50 55 60
Pro Gly Pro Ala Thr Ala Ser Gln Arg Ala Gly Ala Leu Thr Ser Thr
 65 70 75 80
Trp Ser Cys Leu Pro His Cys Ser Ser Arg Arg Val
 85 90

<210> 3201
<211> 390
<212> DNA
<213> Homo sapiens

<400> 3201
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cccggtcgccgct ctgccccagg ctggacggaa gggccacgct gcagccgggg tgagcacagc
 120
gaagccgaca gcctttggga ccgaggtcag cagctgcacc ggcccaagaa ttccaaacac
 180
agctgtggct gaagggcctg ggggtgtgca ggtcccaaac cccagtgagc ctgatcccga
 240
catgggtcct gtctcctggg ggccaccttt gtgtcccggt gtggctgacc ctgagaggga
 300
gggctgtggg gatgctcaca tgacactggg gtcccagcga cagccctcc tcacgctgcg
 360
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 390

<210> 3202
<211> 116
<212> PRT
<213> Homo sapiens

<400> 3202
Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

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Lys	Gly	His	Ala
Ala	Ala	Ala	Gly
Ala	Val	Ser	Thr
Ala	Asn	Pro	Thr
Ala	Phe		
20	25	30	
Gly	Thr	Glu	Val
Val	Ser	Ser	Cys
Ser	Thr	Gly	Ala
		Arg	Ile
		Pro	Asn
		Thr	Ala
35	40	45	
Val	Ala	Glu	Gly
Gly	Pro	Gly	Gly
Val	Gln	Val	Pro
Ala	Asn	Asn	Pro
		Ser	Glu
			Pro
50	55	60	
Asp	Pro	Asp	Met
Asp	Gly	Pro	Gly
Met	Pro	Val	Ser
		Trp	Gly
		Pro	Pro
		Leu	Cys
		Pro	Val
65	70	75	80
Val	Ala	Asp	Pro
Asp	Glu	Arg	Glu
Glu	Gly	Cys	Gly
Cys	Asp	Ala	His
		His	Met
		Met	Thr
		Leu	Leu
85	90	95	
Gly	Ser	Gln	Arg
Gln	Pro	Leu	Leu
Arg	Thr	Leu	Arg
		Val	Pro
			Gly
			Ala
			Ser
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Gln	Glu	Gly	Arg
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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cacggtgccca gcattgagag ttggacacccc gggtccttga agtcatcttctt aggccccagc
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240
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660
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720
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780
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960
960

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 1800
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 1860
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 1906

<210> 3204
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 3204
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 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly
 20 25 30
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 35 40 45
 Ile Glu Lys Ala Tyr Ala Gln Leu Ala Asp Trp Ala Arg Lys Trp
 50 55 60
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala
 65 70 75 80
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu
 85 90 95
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala
 100 105 110
 Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu

115	120	125
Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu		
130	135	140
Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala		
145	150	155
Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala		
165	170	175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val		
180	185	190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln		
195	200	205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met		
210	215	220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu		
225	230	235
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser		
245	250	255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile		
260	265	270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His		
275	280	285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu		
290	295	300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro		
305	310	315
Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala		
325	330	335
Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu		
340	345	350
Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val		
355	360	365
Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe		
370	375	380
Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly		
385	390	395
Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala		
405	410	415
Asn Tyr Val Glu Cys Val Gly Ala		
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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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ggctctggcca agacacccct atctgctctg ggcctgaaac ctcacaaccc agcggacatc

120

ctgttgcacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg

180

gctggacccc gagctcagga ctctgagccc aagagttta gtgctccagc cacccaggcc

240

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 300
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg
 360
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 420
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 480
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 720
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 1020
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 1380
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 1482

<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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Lys	Pro	His	Asn	Pro	Ala	Asp	Ile	Leu	Leu	His	Pro	Thr	Gly	Glu	Pro

35	40	45
Arg Ser Tyr Val Glu Ser Val Ala Arg Thr Ala Val Ala Gly Pro Arg		
50	55	60
Ala Gln Asp Ser Glu Pro Lys Ser Phe Ser Ala Pro Ala Thr Gln Ala		
65	70	75
Tyr Gly His Glu Ile Pro Leu Arg Asn Gly Thr Leu Gly Gly Ser Phe		
85	90	95
Val Ser Pro Ser Pro Leu Ser Thr Ser Ser Pro Ile Leu Ser Ala Asp		
100	105	110
Ser Thr Ser Val Gly Ser Phe Pro Ser Gly Glu Ser Ser Asp Gln Gly		
115	120	125
Pro Arg Thr Pro Thr Gln Pro Leu Leu Glu Ser Gly Phe Arg Ser Gly		
130	135	140
Ser Leu Gly Gln Pro Ser Pro Ser Ala Gln Arg Asn Tyr Gln Ser Ser		
145	150	155
Ser Pro Leu Pro Thr Val Gly Ser Ser Tyr Ser Ser Pro Asp Tyr Ser		
165	170	175
Leu Gln His Phe Ser Ser Ser Pro Glu Ser Gln Ala Arg Ala Gln Phe		
180	185	190
Ser Val Ala Gly Val His Thr Val Pro Gly Ser Pro Gln Ala Arg His		
195	200	205
Arg Thr Val Gly Thr Asn Thr Pro Pro Ser Pro Gly Phe Gly Trp Arg		
210	215	220
Ala Ile Asn Pro Ser Met Ala Ala Pro Ser Ser Pro Ser Leu Ser His		
225	230	235
His Gln Met Met Gly Pro Pro Gly Thr Gly Phe His Gly Ser Thr Val		
245	250	255
Ser Ser Pro Gln Ser Ser Ala Ala Thr Thr Pro Gly Ser Pro Ser Leu		
260	265	270
Cys Arg His Pro Ala Gly Val Tyr Gln Val Ser Gly Leu His Asn Lys		
275	280	285
Val Ala Thr Thr Pro Gly Ser Pro Ser Leu Gly Arg His Pro Gly Ala		
290	295	300
His Gln Gly Asn Leu Ala Ser Gly Leu His Ser Asn Ala Ile Ala Ser		
305	310	315
Pro Gly Ser Pro Ser Leu Gly Arg His Leu Gly Gly Ser Gly Ser Val		
325	330	335
Val Pro Gly Ser Pro Cys Leu Asp Arg His Val Ala Tyr Gly Gly Tyr		
340	345	350
Ser Thr Pro Glu Asp Arg Arg Pro Thr Leu Ser Arg Gln Ser Ser Ala		
355	360	365
Ser Gly Tyr Gln Ala Pro Ser Thr Pro Ser Phe Pro Val Ser Pro Ala		
370	375	380
Tyr Tyr Pro Gly Leu Ser Ser Pro Ala Thr Ser Pro Ser Pro Asp Ser		
385	390	395
400		
Ala Ala Phe Arg Gln Gly Ser Pro Thr Pro Ala Leu Pro Glu Lys Arg		
405	410	415
Arg Met Ser Val Gly Asp Arg Ala Gly Ser Leu Pro Asn Tyr Ala Thr		
420	425	430
Ile Asn Gly Lys Val Ser Ser Pro Val Ala Ser Gly Met Ser Ser Pro		
435	440	445
Ser Gly Gly Ser Thr Val Ser Phe Ser His Thr Leu Pro Asp Phe Ser		
450	455	460
Lys Tyr Ser Met Pro Asp Asn Ser Pro Glu Thr Arg Ala Lys Val Lys		

465	470	475	480
Phe	Val	Gln	Asp
Thr	Ser	Lys	Tyr
Trp	Tyr	Lys	Pro
		Lys	Ile
			485
			490

<210> 3207
<211> 495
<212> DNA
<213> Homo sapiens

<400> 3207
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120
ctgtcgcgca agctgcataa gatcctggag acgcggctgg acaacgacaa ggagatgtta
180
gaagctctca aggcaacttc aacctttttt gttaaaata gtctgcggac tcgaagaaat
240
ttacgtggag atattgaacg taaaagttta gccatcaatg aagaatttgt aagcattttc
300
aaggaagtga aggaggaact tgaaagcata agcgaagatg ttcaagcaat gagcaactgt
360
tgtcaagata tgacaagtcg cctacaggca gcaaaggaac agactcaaga tttaatagta
420
aataccacta agcttcaatc tgaaagccaa aaatttagaga taagagctca agttgcagat
480
gccttcttat ccaag
495

<210> 3208
<211> 107
<212> PRT
<213> Homo sapiens

<400> 3208
Met Leu Glu Ala Leu Lys Ala Leu Ser Thr Phe Phe Val Glu Asn Ser
1 5 10 15
Leu Arg Thr Arg Arg Asn Leu Arg Gly Asp Ile Glu Arg Lys Ser Leu
20 25 30
Ala Ile Asn Glu Glu Phe Val Ser Ile Phe Lys Glu Val Lys Glu Glu
35 40 45
Leu Glu Ser Ile Ser Glu Asp Val Gln Ala Met Ser Asn Cys Cys Gln
50 55 60
Asp Met Thr Ser Arg Leu Gln Ala Ala Lys Glu Gln Thr Gln Asp Leu
65 70 75 80
Ile Val Asn Thr Thr Lys Leu Gln Ser Glu Ser Gln Lys Leu Glu Ile
85 90 95
Arg Ala Gln Val Ala Asp Ala Phe Leu Ser Lys
100 105

<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens

<400> 3209
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tgcgtccagc ctgtccctt ctgacctggg ccctacccac gggaaatgt tcccatagca
120
gaagaatcag ccccacagtg caggggtgtg tttagtgggaa acgggctctg ggctcctgtg
180
ggaaccagg accccctatac ttggtacccgg tcattggatg tatccccagc tcatgcctgt
240
gtctgtcttg gcccgtgtgg tcaccctgtg ttcatctctc tcccagccat ggccctctcaa
300
actggggttt tcgtctccct atgaggggt cctggtatgt acgcgt
346

<210> 3210
<211> 95
<212> PRT
<213> Homo sapiens

<400> 3210
Met Arg Pro Ala Leu Ser Leu Leu Thr Trp Ala Leu Pro Thr Gly Lys
1 5 10 15
Cys Ser His Ser Arg Arg Ile Ser Pro Thr Val Gln Gly Cys Val Ser
20 25 30
Gly Glu Arg Ala Leu Gly Ser Cys Gly Asn Gln Gly Pro Pro Ile Leu
35 40 45
Val Pro Val Ile Gly Cys Ile Pro Ser Ser Cys Leu Cys Leu Ser Trp
50 55 60
Pro Val Trp Ser Pro Cys Val His Leu Ser Pro Ser His Gly Leu Ser
65 70 75 80
Asn Trp Gly Phe Arg Leu Pro Met Arg Gly Ser Trp Tyr Val Arg
85 90 95

<210> 3211
<211> 1728
<212> DNA
<213> Homo sapiens

<400> 3211
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120
gtttccttgg ccatcgtgca agccagtcgg aaggaccagg gactctatta ctgctgcattc
180
aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
240
ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
300
caaagaagac ttccctccatg acagctactt tgggggccgc ctgcgtggc agatcgccac
360
ggaggagctg cactttggag aagggttca ccgcaaagcc ttccgcagca cagtgatgca
420

cggcctcatg cctgtttca aacctggcca tgcctgtgtg cttaaggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgccc
 540
 ggaatgctat gttcaaaaata ctgccaggta ttatgccaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct attttctta tccatcgcc
 660
 tgagaacaat atccccgtatg ctacagtgga ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaaactt cttgagaaga gaatcagaag ctggtcagaa
 780
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 900
 caagggattt aaaggcaact gttccatgac cttcattgat cagttaaag cactacacca
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 1080
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1560
 atcaagttgt tccactggtg tctaatacgc tattgttgcc ggaggtgggt tctgtgacgt
 1620
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 1680
 taaacaa
 1728

<210> 3212
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 3212
 Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp
 1 5 10 15
 Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

20	25	30
Lys Ser Ala Gly Asp Asn Ser	Ser Val Ser Leu Ala Ile Val Gln Ala	
35	40	45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr		
50	55	60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln		
65	70	75
Leu Ser Ser His Thr Glu Tyr		
85		

<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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acgcgtgaag gggaaaggcggc ggggttagtaa cagattatgg gcaacagtcc ttttaattaa
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tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaaactcat cttggcccaa atcaataaga tgagaaatgg acagcattc
180
tgtgatgtgc agctgcaagt tggacaggaa agttttaaag ctcatcggtt ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaaagat
300
gttgtaccga ttcttaggaat tgaaggcagga atctttcaga tacttcta
348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser			
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn			
20	25	30	
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe			
35	40	45	
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala			
50	55	60	
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile			
65	70	75	80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu			
85	90		

<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 120
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 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccc accgtggctc cgacccaggg
 300
 accagccgc cacaccttag cacctgcggc ctgggcacccg gggaggagag ccgacaatcc
 360
 caagccaacg ccccccgtgtc tcagcagaac gtccctgcaca ccggaaagag gtggttcatc
 420
 atctgtccgg tgcctgagcc ccccgcccc gaggccctt gaatcttcgc ccccaacttcc
 480
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 597

<210> 3216
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3216
 Thr Arg Ala Arg Ser Arg Gln Glu Arg Ala Ser Arg Pro Arg Leu Thr
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 Ile Leu Asn Val Cys Asn Thr Gly Asp Lys Met Val Glu Cys Gln Leu
 20 25 30
 Glu Thr His Asn His Lys Met Val Thr Phe Lys Phe Asp Leu Asp Gly
 35 40 45
 Asp Ala Pro Asp Glu Ile Ala Thr Tyr Met Val Glu His Asp Phe Ile
 50 55 60
 Leu Gln Ala Glu Arg Glu Thr Phe Ile Glu Gln Met Lys Asp Val Met
 65 70 75 80
 Asp Lys Ala Glu Asp Met Leu Ser Glu Asp Thr Asp Ala Asp Arg Gly
 85 90 95
 Ser Asp Pro Gly Thr Ser Pro Pro His Leu Ser Thr Cys Gly Leu Gly
 100 105 110
 Thr Gly Glu Glu Ser Arg Gln Ser Gln Ala Asn Ala Pro Val Tyr Gln
 115 120 125
 Gln Asn Val Leu His Thr Gly Lys Arg Trp Phe Ile Ile Cys Pro Val
 130 135 140
 Pro Glu Pro Pro Ala Pro Glu Gly Pro
 145 150

<210> 3217
 <211> 2570
 <212> DNA
 <213> Homo sapiens

<400> 3217

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120
acccataccca ggcactatga gctttacagg cgctgcaaac tggagggaaat gggcttaca
180
gatgtgggcc cagaaaacaa gccagtca gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatgtt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag
360
cacctaaga gacttcacca agaagagaga atgaagctt aagaacaaag aagactttt
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tccttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
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600
aaaactagaa gtgtgctttt attttgcgtt tatttgcgtt atcacttcta tatttggta
660
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720
ccagagtgaa tgatactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
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840
gacacctttg ctttctgatg gttcagttt aacagatttt gtttcttgc aaaaattttt
900
gtataaatta ct当地ggct atatgtataa ggtggatgtg aaacatgaat tatgtat
960
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1020
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1080
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1140
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1200
gaacccatta atatcggtgc tatctgatta catttatatt ccaagatgaa cctttttta
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1320
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1380
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1560
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1620

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1680
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1800
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1860
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1920
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1980
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2040
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2100
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2160
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2220
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2280
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2460
aactggggat tgggtggca ggaaaaggtg atatccattc tttctgataa ctagatggtg
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2570

<210> 3218
<211> 181
<212> PRT
<213> Homo sapiens

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<400> 3218
Gly Val Lys Ala Arg Gln Tyr Pro Trp Gly Val Val Gln Val Glu Asn
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Glu Asn His Cys Asp Phe Val Lys Leu Arg Glu Met Leu Ile Cys Thr
      20          25          30
Asn Met Glu Asp Leu Arg Glu Gln Thr His Thr Arg His Tyr Glu Leu
      35          40          45
Tyr Arg Arg Cys Lys Leu Glu Glu Met Gly Phe Thr Asp Val Gly Pro
      50          55          60
Glu Asn Lys Pro Val Ser Val Gln Glu Thr Tyr Glu Ala Lys Arg His
      65          70          75          80
Glu Phe His Gly Glu Arg Gln Arg Lys Glu Glu Glu Met Lys Gln Met
      85          90          95
Phe Val Gln Arg Val Lys Glu Lys Glu Ala Ile Leu Lys Glu Ala Glu
      100         105         110
Arg Glu Leu Gln Ala Lys Phe Glu His Leu Lys Arg Leu His Gln Glu

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115	120	125
Glu	Arg	Met
Lys	Leu	Glu
Glu	Gln	Arg
Glu	Arg	Leu
Ile		
130	135	140
Ile	Ala	Phe
Ser	Lys	Lys
Lys	Ala	Thr
145	150	155
Ser	Phe	Leu
Leu	Ala	Thr
Gly	Ser	Asn
Asn	Leu	Ser
165	170	175
Asn	Ser	Asn
Asn	Phe	Leu
180		

<210> 3219
<211> 1241
<212> DNA
<213> Homo sapiens

<400> 3219

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120
gagcgggaga cagacatcct ggacgatgaa ttgccaaacc aggatggtca cagtgcgggc
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720
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1080
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1140

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1200
tcagaccctt cccggactcc agaggaggag ccattgaatt c
1241

<210> 3220
<211> 413
<212> PRT
<213> Homo sapiens

<400> 3220
Ala Arg His Val Pro His Pro Ala Pro Gln Val Pro Pro Ser Arg Gly
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20 25 30
Val Asn Gly Gly Xaa Val Thr Ser Glu Arg Glu Thr Asp Ile Leu Asp
35 40 45
Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr
50 55 60
Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro
65 70 75 80
Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met
85 90 95
Glu Pro Met Val Asn Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg
100 105 110
Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr
115 120 125
Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro
130 135 140
Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser
145 150 155 160
Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro
165 170 175
Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly
180 185 190
Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro
195 200 205
Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser
210 215 220
Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro
225 230 235 240
Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu
245 250 255
Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala
260 265 270
Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser
275 280 285
Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro
290 295 300
Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly
305 310 315 320
Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly
325 330 335
Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

340	345	350
Gln Asp Phe His Ser Lys Ser Pro Ala Ser Ser Ser Leu Pro Ala Phe		
355	360	365
Leu Pro Thr Thr His Ser Pro Pro Gly Pro Gln Gln Pro Pro Ala Ser		
370	375	380
Leu Pro Gly Leu Thr Ala Gln Pro Leu Leu Ser Pro Lys Glu Ala Thr		
385	390	395
Ser Asp Pro Ser Arg Thr Pro Glu Glu Pro Leu Asn		
405	410	

<210> 3221

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 3221

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 720
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 780
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 1080
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 1140

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 1200
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 1440
 acaatataat ttacattaaa aaataattc taccaaaatg gaaaggaaat gttctatgtt
 1500
 gttcaggcta ggagtatatt ggttcgaaat cccagggaaa aaaaataaaaa ataaaaaatt
 1560
 aaaggattgt tgataaaaaaa aaaaa
 1585

<210> 3222
 <211> 331
 <212> PRT
 <213> Homo sapiens

<400> 3222
 Leu Leu Ala Val Leu Arg Pro Arg Arg Ser Arg Lys Arg His Val Gln
 1 5 10 15
 Trp Val Glu Glu Pro Gln Arg Ser Cys Thr Ala Arg Arg Trp His Ile
 20 25 30
 Gln Ala Thr Gly Gly Val Glu Pro Ala Gly Trp Lys Glu Met Arg Cys
 35 40 45
 His Leu Arg Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu Val Leu
 50 55 60
 Cys Pro Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr Arg Ala
 65 70 75 80
 Pro Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro Gly Thr
 85 90 95
 Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val Thr Cys
 100 105 110
 Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly Asp Val
 115 120 125
 Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys Cys Ala Glu
 130 135 140
 Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala Cys Glu Cys Ala
 145 150 155 160
 Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser Cys Val Thr Ser Gly
 165 170 175
 Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly Val Pro Thr Arg Arg Pro
 180 185 190
 Pro Ala Thr Ala Thr Ser Pro Val Pro Gln Arg Thr Trp Pro Ile Arg
 195 200 205
 Val Asp Glu Lys Leu Gly Glu Thr Pro Leu Val Pro Glu Gln Asp Asn
 210 215 220
 Ser Val Thr Ser Ile Pro Glu Ile Pro Arg Trp Gly Ser Gln Ser Thr
 225 230 235 240
 Met Ser Thr Leu Gln Met Ser Leu Gln Ala Glu Ser Lys Ala Thr Ile

245	250	255
Thr Pro Ser Gly Ser Val Ile Ser Lys Phe Asn Ser Thr Thr Ser Ser		
260	265	270
Ala Thr Pro Gln Ala Phe Asp Ser Ser Ser Ala Val Val Phe Ile Phe		
275	280	285
Val Ser Thr Ala Val Val Leu Val Ile Leu Thr Met Thr Val Leu		
290	295	300
Gly Leu Val Lys Leu Cys Phe His Glu Ser Pro Ser Ser Gln Pro Arg		
305	310	315
Lys Glu Ser Met Gly Pro Pro Gly Cys Asp Glu		
325	330	

<210> 3223

<211> 985

<212> DNA

<213> Homo sapiens

<400> 3223

nnacgcgtgg ttcacgggct gcagcctccc tgcttccagg agccgtgcag caaccccgac
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 agcctgattt ttggggcaact gaccatcatg accggcgtca ttggggtcata cttggggggca
 120
 gaagcttcga ggaggtacaa gaaagtcatc ccaggagctg agcccctcat ctgcgcctcc
 180
 agcctgttg ccacagcccc ctgcctctac ctggctctcg tcctggcccc gaccaccctg
 240
 ctggccttcct atgtgttcctt gggccttggg gagctgcttc tgtcctgcaa ctgggcagtg
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 gttgccgaca tcctgctgtc tgggtgggtg cccagatgcc gggggacggc agaggcactt
 360
 cagatcacgg tgggccacat cctggagac gctggcagcc cctatctcac aggacttac
 420
 tcttagtgtcc tgcggccagg cgccctgact cctctgcagc gcttccgcag cctgcagcag
 480
 agcttccctgt gctgcgcctt tgtcatcgcc ctggggggcg gctgcttcct gctgactgcg
 540
 ctgtacctgg agagagacga gacccgggccc tggcagcctg tcacagggac cccagacagc
 600
 aatgatgtgg acagcaacga cctggagaga caaggcctac ttccggcgc tggcgctct
 660
 acagaggagc cctgagggtcc ctgcctacac tcgtcctgcc tgcaagcctc ccgttggtcc
 720
 ccacagcagc agtgcctcgg ttccctttg gctgtcctcg gggactccgg ctgaggcaca
 780
 tctgccactt ttgaattccc ggctggagag ctggcaggac cctgtggctg ggctggaaat
 840
 ggagctgtca gcactctgcg tgggaggcct gggcctgtgc ctgcaccccg ctcaaggctg
 900
 ccccagcctg gggccccag cctggctgct gctggccct gaataaaagag aggcagatc
 960
 aaagcccatg gatttgggc ctgtta
 985

<210> 3224

<211> 224
<212> PRT
<213> *Homo sapiens*

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<210> 3225  
<211> 506  
<212> DNA  
<213> Homo sapiens
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<400> 3225
cgccctgcccc agtccatctg tgacaggcgg gcgtgagtgt agaggaatacg ctaggctgt
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gcagtcgaaa ttctttctga accccatata ggatgaaggt tatatttcca aaattaaaaac
120
agaggaacat tttaaatggc ctacgtccat gcacccctt tattcaagaa gctaccaaga
180
attctgctg tttcccagtc cctaaaatgc ctgtgccatg tgccctgggt gaagaactag
240
tccccatgcca caggggtaca ggccccgctg tagttggcc agcccaaccg cagcaagggg
300
aagtggAACc acagcctcaa cccacacaga ggatggAACc accttctgca gctaaaaata
360
accacacccgc ctttgagggtg agccacccaa gatgcagggtg gggctgtatg aaactccacg
420

aacatggat gagtttcatt ttcagggttc cgaggggcca tgagtggtac caagatccct
480
ggaggtgccc ttggtttccc atgttag
506

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<210> 3226  
<211> 137  
<212> PRT  
<213> Homo sapiens
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```
<210> 3227  
<211> 1623  
<212> DNA  
<213> Homo sapiens
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<400> 3227
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agaactgagag aggaaaggat agaggaagtg ctgccttagg ctgcataagt cgaagcaagc
120
gtgttcctt cccgccaggc aagtgcctt agaaaccggg ccccgcccccc ttccctggcct
180
gcattcccat cccctctccc ggggcggagg tgaggacctc cttggttctt ttgggtctgt
240
cagttagcccc ctcccttggc catgaagctc gtgaggaaga acatcgagaa ggacaatgcg
300
ggccaggtga ccctggtccc cgaggagcct gaggacatgt ggcacactta caacctcgta
360
caggtggcgc acagcctgcg cgcctccacc atccgcaagg tacagacaga gtcctccacg
420
ggcagcgtgg gcagcaaccg ggtccgcact accctcaactc tctgcgtgga ggccatcgac
480
ttcgactctc aagcctgcca gctgcgggtt aaggggacca acatccaaga gaatgagttat
540

gtcaagatgg gggcttacca caccatcgag ctggagccca accgccagtt caccctggcc
 600
 aagaagcagt gggatagtgt ggtactggag cgcatcgagc aggcctgtga cccagcctgg
 660
 agcgctgatg tggcggtgt ggtcatcgag gaaggcctcg cccatatctg cttagtcact
 720
 cccagcatga ccctcactcg ggccaaggtg gaggtgaaca tccctaggaa aaggaaaggc
 780
 aattgtctc agcatgaccg ggccttggag cggttctatg aacaggttgtt ccaggctatc
 840
 cagcgccaca tacactttga tggtgtaaag tgcacccctgg tggccagccc aggatttgt
 900
 agggagcagt tctgcgacta catgttcaa caagcagtga agaccgacaa caaactgctc
 960
 ctggaaaacc ggtccaaatt tcttcaggta catgcctctt ccggacacaa gtactccctg
 1020
 aaagagggccc ttgtgaccc tactgtggct agccgcctt cagacactaa agctgctgg
 1080
 gaagtcaaag cttggatga cttctataaa atgttacagc atgaaccgga tcgagcttc
 1140
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 1200
 agcgatgagc tcttcaggca tcaggatgtt gccacacgga gccggtatgt gaggctgg
 1260
 gacagtgtga aagagaatgc aggcaccgtt agatattct ctagtcttca cgttctgg
 1320
 gaacagctca gccagttgac tgggttagct gccattctcc gcttccctgt tcccgaaactt
 1380
 tctgaccaag agggtgattc cagttctgaa gaggattaat gattgaaact taaaatttag
 1440
 acaatcttgcgtt gttcctaaa ctgttacagt acatttctca gcattccctgt gacagaaagc
 1500
 tgcaagaatg gcacttttg attcatacag ggatttctta tgtctttggc tacactagat
 1560
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 1620
 aaa
 1623

<210> 3228
 <211> 385
 <212> PRT
 <213> Homo sapiens

<400> 3228
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 1 5 10 15
 Thr Leu Val Pro Glu Glu Pro Glu Asp Met Trp His Thr Tyr Asn Leu
 20 25 30
 Val Gln Val Gly Asp Ser Leu Arg Ala Ser Thr Ile Arg Lys Val Gln
 35 40 45
 Thr Glu Ser Ser Thr Gly Ser Val Gly Ser Asn Arg Val Arg Thr Thr
 50 55 60
 Leu Thr Leu Cys Val Glu Ala Ile Asp Phe Asp Ser Gln Ala Cys Gln

65	70	75	80
Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met			
85	90	95	
Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu			
100	105	110	
Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala			
115	120	125	
Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu			
130	135	140	
Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg			
145	150	155	160
Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser			
165	170	175	
Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala			
180	185	190	
Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala			
195	200	205	
Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln			
210	215	220	
Ala Val Lys Thr Asp Asn Lys Leu Leu Glu Asn Arg Ser Lys Phe			
225	230	235	240
Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala			
245	250	255	
Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala			
260	265	270	
Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu			
275	280	285	
Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu			
290	295	300	
Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His			
305	310	315	320
Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val			
325	330	335	
Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser			
340	345	350	
Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe			
355	360	365	
Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu			
370	375	380	
Asp			
385			

<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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cctgcactgg gcgcgcgaga gctgctaggg cggtttctct gcctcgggcc tggggcag
120
ggccggctaa ggtgcgcgtg ctgcgtggtt ctaacccttc tggtggcgt ttctgctgag
180
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aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcctt gtcgttgaa
240
gctttcgga ggccggcgatc cccgaaggcg agctgaaata cggctgcagg ctacaatttg
300
cagccgacca ttatggaaga cggcaagcgg gagaggtggc ccaccctcat ggagcgcttg
360
tgctcgatg gcttcgcatt tccccaaatac cccattaaac cgtatcatct gaagaggatc
420
cacagagctg tcttacgtgg taatctggag gaactgaagt accttctgct cacgtattat
480
gacatcaaata agagagacag gaagggaaagg accgcctac atttggcctg tgccactggc
540
540
caaccggaaa tggtacatct cctggtgtcc agaagatgtg agcttaacct ctgcgaccgt
600
600
gaagacagga cacctctgat caaggctgta caactgaggc aggaggctt tgcaactctt
660
660
ctgctgcaaa atggcgccga tccaaatatt acggatgtct ttggaaggac tgctctgcac
720
720
tacgctgtgt ataatgaaga tacatccatg atagaaaaac ttctttcaca tggtacaaat
780
780
attgaagaat gcagcaagaa tgaatatcag ccactgttac ttgctgtgag tcgaagaaaa
840
840
gtgaaaatgg tggaaatttt attaaagaaa aaagcaaatg taaaatgccat tgattatctt
900
900
ggcagatcag ccctcatact tgctgttact cttggagaaa aagatatagt cattcttctt
960
960
ctgcagcaca atattgtatgt gtttctcga gatgtgtatg gaaagctt
1008

<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

Met Glu Asp Gly Lys Arg Glu Arg Trp Pro Thr Leu Met Glu Arg Leu
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Cys Ser Asp Gly Phe Ala Phe Pro Gln Tyr Pro Ile Lys Pro Tyr His
20 25 30

Leu Lys Arg Ile His Arg Ala Val Leu Arg Gly Asn Leu Glu Glu Leu
35 40 45

Lys Tyr Leu Leu Leu Thr Tyr Tyr Asp Ile Asn Lys Arg Asp Arg Lys
50 55 60

Glu Arg Thr Ala Leu His Leu Ala Cys Ala Thr Gly Gln Pro Glu Met
 65 70 75 80

Val His Leu Leu Val Ser Arg Arg Cys Glu Leu Asn Leu Cys Asp Arg
 85 90 95

Glu Asp Arg Thr Pro Leu Ile Lys Ala Val Gin Leu Arg Gin Glu Ala
 100 105 110
 Cys Tyr Ile Ile Ile Glu Met Glu Ala Asp Phe Leu Thr Asp

Cys Ala Thr Leu Leu Leu Gin Asn Gly Ala Asp Pro Asn Ile Thr Asp
 115 120 125
 Val Phe Glu Asp Thr Asp Asp Val Thr Asp Lys Lys Asp Val Thr

Val Phe Gly Arg Thr Ala Leu His Tyr Ala Val Tyr Asn Glu Asp Thr
 130 135 140
 Ser Met Ile Glu Lys Lys Lys Ser His Glu Thr Asp Ile Glu Glu Cys

Ser Met Ile Glu Lys Leu Leu Ser His Glu Thr Asn Ile Glu Glu Cys

145 150 155 160
Ser Lys Asn Glu Tyr Gln Pro Leu Leu Leu Ala Val Ser Arg Arg Lys
 165 170 175
Val Lys Met Val Glu Phe Leu Leu Lys Lys Lys Ala Asn Val Asn Ala
 180 185 190
Ile Asp Tyr Leu Gly Arg Ser Ala Leu Ile Leu Ala Val Thr Leu Gly
 195 200 205
Glu Lys Asp Ile Val Ile Leu Leu Gln His Asn Ile Asp Val Phe
 210 215 220
Ser Arg Asp Val Tyr Gly Lys Leu
 225 230

<210> 3231
<211> 1367
<212> DNA
<213> Homo sapiens

<400> 3231
nnacgcgtga agggaaagtt tcgcctcaga aggctgcctc gctggtccga attcggtggc
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gccacgtccg cccgtctccg ccttctgcat cgccgcttcg gcggcttcca cctagacacc
120
taacagtgcg ggagccggcc gcgtcgttag ggggtcggca cggggagtcg ggccgtcttg
180
tgcatcttgg ctacctgtgg gtcgaagatg tcggacatcg gagactggtt caggagcatc
240
ccggcgatca cgcgtatttgc ttccgcgc accgtcgccg tgcccttggt cggcaaactc
300
ggcctcatca gcccggccta ccttttcctc tggcccgaaag cttcccttta tcgccttcag
360
atttggaggc caatcaactgc caccttttat ttccctgtgg gtccaggaac tggatttctt
420
tatttggtca atttatattt cttatatacg tattctacgc gacttgaac aggagcttt
480
gatggggaggc cagcagacta tttattcatg ctcccttta actggatttgc catcgtgatt
540
actggcttag caatggatat gcagttgtgc atgatttcctc tgatcatgtc agtactttat
600
gtctggggccc agctgaacag agacatgatt gtatcatttt ggtttggaaac acgatttaag
660
gcctgcatt tacccctgggt tatcccttggaa ttcaactata tcatcgagg ctccgttaatc
720
aatgagctta ttggaaatct ggttggacat ctttattttt tcctaattttt cagataccca
780
atggacttgg gaggaagaaa ttttctatcc acacctcagt ttttgtaccg ctggctgccc
840
agtaggagag gaggagtatc aggatttggt gtgcggccctg ctagcatgag gcgagctgct
900
gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
960
tgaaggggcg gcctcggca gcoctcctc tcaagccaca tttccctcca gtgcgtgggt
1020
cacttaacaa ctgcgttctg gctaacaactg ttggacactga cccacactga atgttagtctt
1080

tcagtagcgg acaaaggttc ttaaatcccg aagaaaaata taagtgttcc acaagttca
1140
cgattctcat tcaagtcctt actgctgtga agaacaata ccaactgtgc aaattgc当地
1200
actgactaca ttttttggtg tttttttttt tcccccttcc gttctgaata atgggtttt
1260
gcgggtccta gtctgctggc attgagctgg ggctgggtca ccaaaccctt cccaaaagga
1320
cccttatctc tttcttgcac acatgcctct ctccccccctt cacgcgt
1367

<210> 3232
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 3232
 Met Ser Asp Ile Gly Asp Trp Phe Arg Ser Ile Pro Ala Ile Thr Arg
 1 5 10 15
 Tyr Trp Phe Ala Ala Thr Val Ala Val Pro Leu Val Gly Lys Leu Gly
 20 25 30
 Leu Ile Ser Pro Ala Tyr Leu Phe Leu Trp Pro Glu Ala Phe Leu Tyr
 35 40 45
 Arg Phe Gln Ile Trp Arg Pro Ile Thr Ala Thr Phe Tyr Phe Pro Val
 50 55 60
 Gly Pro Gly Thr Gly Phe Leu Tyr Leu Val Asn Leu Tyr Phe Leu Tyr
 65 70 75 80
 Gln Tyr Ser Thr Arg Leu Glu Thr Gly Ala Phe Asp Gly Arg Pro Ala
 85 90 95
 Asp Tyr Leu Phe Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr
 100 105 110
 Gly Leu Ala Met Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser
 115 120 125
 Val Leu Tyr Val Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe
 130 135 140
 Trp Phe Gly Thr Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu
 145 150 155 160
 Gly Phe Asn Tyr Ile Ile Gly Gly Ser Val Ile Asn Glu Leu Ile Gly
 165 170 175
 Asn Leu Val Gly His Leu Tyr Phe Phe Leu Met Phe Arg Tyr Pro Met
 180 185 190
 Asp Leu Gly Gly Arg Asn Phe Leu Ser Thr Pro Gln Phe Leu Tyr Arg
 195 200 205
 Trp Leu Pro Ser Arg Arg Gly Gly Val Ser Gly Phe Gly Val Pro Pro
 210 215 220
 Ala Ser Met Arg Arg Ala Ala Asp Gln Asn Gly Gly Gly Arg His
 225 230 235 240
 Asn Trp Gly Gln Gly Phe Arg Leu Gly Asp Gln
 245 250

<210> 3233
<211> 975
<212> DNA
<213> *Homo sapiens*

<400> 3233
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accgttgttt accttggc ttccatctg ttctttgtta tgtttgtatg gtcctattgg
120
atgacaattt tcacatctcc cgttcccccc tccaaagagt tctacttgtc caattctgaa
180
aaggAACGTT ataaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
240
gcaagagctt tacatatcta taccacatca gttcaaaaaa ctatcagata ttgtgaaaaa
300
tgtcagctga ttaaacctga tcgggcat cactgcttag cctgtgactc atgtattctt
360
aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gatTTTctaa ttacaaattc
420
ttcctgtgt ttttattgtt ttccctatta tattgccttt tcgtggccgc acagtttag
480
agtactaaa aaattttgga cgaaagaacc gaccaaaacc cggggcaaaaa ttccacgtac
540
tttttcttt tctttgtgtc tgcaatgttc ttcatcagcg tcctctact tttcagctac
600
cactgctggc tttaaacagc attgtccaca gctccgtctg cagggtcagg gcatggcctc
660
tctccgtgtt cctgtgaaga gccttcattt gaatcatccc gggacataca gcttgaatgt
720
gctgtctggc tagccctcc acaagtcggt cactctgcac aaggaatccg agagctcatc
780
aaggatcagc acggctctggg gcccagggtgg ggtggAACAC gcacggtcca caagcaattc
840
tgtctttctc aaggctttt cttgtgcagt atgaaatctt tcataattca tatgaagtat
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960
cttcaaggct gcccc
975

<210> 3234
<211> 159
<212> PRT
<213> Homo sapiens

<400> 3234
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1 5 10 15
Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe
20 25 30
Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
35 40 45
Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
50 55 60
Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
65 70 75 80
Ala Arg Ala Leu Pro Ile Tyr Thr Ser Ala Ser Lys Thr Ile Arg

85	90	95
Tyr Cys Glu Lys Cys Gln Leu Ile Lys Pro Asp Arg Ala His His Cys		
100	105	110
Ser Ala Cys Asp Ser Cys Ile Leu Lys Met Asp His Pro Cys Pro Trp		
115	120	125
Val Asn Asn Cys Val Gly Phe Ser Asn Tyr Lys Phe Phe Leu Leu Phe		
130	135	140
Leu Leu Tyr Ser Leu Leu Tyr Cys Leu Phe Val Ala Ala Gln Phe		
145	150	155

<210> 3235

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3235

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 gaagccagaa ggcagcttcg agatgaatct cagttacgac aggatgtaga gaatgagcta
 120
 gcagtacaag ttagtatgaa gcatgagatt gaacttgcca tgaagttgct ggagaaaat
 180
 atccatgaga aacaagatac tctgataggc ctgcacaac aactagagga agttaaagca
 240
 attaacatag agatgtatca aaagttgcag gttctgaag atggcttgaa agaaaaaaat
 300
 gaaataattg cccgactaga agaaaaacc aataaaatta ctgcagccat gaggcagctg
 360
 gaacaaagat tgcagcaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
 420
 tatctacaag aatgtctcag taaatctgat agtctgcaga aacaaatctc cccaaaggag
 480
 aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagacttg
 540
 551
 caggaagatc t

<210> 3236

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3236

Xaa Glu Thr Glu Leu Gln Thr Tyr Lys His Ser Arg Gln Gly Leu Asp			
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Glu Met Tyr Asn Glu Ala Arg Arg Gln Leu Arg Asp Glu Ser Gln Leu			
20	25	30	
Arg Gln Asp Val Glu Asn Glu Leu Ala Val Gln Val Ser Met Lys His			
35	40	45	
Glu Ile Glu Leu Ala Met Lys Leu Leu Glu Lys Asp Ile His Glu Lys			
50	55	60	
Gln Asp Thr Leu Ile Gly Leu Arg Gln Gln Leu Glu Glu Val Lys Ala			
65	70	75	80
Ile Asn Ile Glu Met Tyr Gln Lys Leu Gln Gly Ser Glu Asp Gly Leu			

85	90	95
Lys Glu Lys Asn Glu Ile Ile Ala Arg Leu Glu Glu Lys Thr Asn Lys		
100	105	110
Ile Thr Ala Ala Met Arg Gln Leu Glu Gln Arg Leu Gln Gln Ala Glu		
115	120	125
Lys Ala Gln Met Glu Ala Glu Asp Glu Asp Glu Lys Tyr Leu Gln Glu		
130	135	140
Cys Leu Ser Lys Ser Asp Ser Leu Gln Lys Gln Ile Ser Gln Lys Glu		
145	150	155
Lys Gln Leu Val Gln Leu Glu Thr Asp Leu Lys Ile Glu Lys Glu Trp		
165	170	175
Arg Gln Thr Leu Gln Glu Asp		
180		

<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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cgccgcgtgt ggaccatggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag
120
gatgaggacc gttggaaagt acggggggac cgcaaggccc ggaagccccct ggtggagaag
180
aagcgcacgcg cgccggatcaa cgagagtctt caggagttgc ggctgtgtct ggccggcc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
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360
ttcgctgccc gctacatcca gtgcacatgcac gaggtgcaca cgttcgtgtc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgtc
480
cgtgagggca gcagcttcca ggatctgtc gggacgcgc tggccgggc acctagagcc
540
cctggacgga gtggctggcc tgcggggggc gctccggat ccccaataacc cagccccccg
600
ggtcctgggg acgacactgtc ctccgacactg gaggaggccc ctgaggctga actgagtcag
660
gctccgtgtc agggggccgaa cttgggtcccc gcagccctgg gcagcctgac cacagccaa
720
attgccccgga gtgtctggag gccttggta ccaatgccag ccagagtctt gcgggggtgg
780
gccccggccct ccctggatct cctccctctt cccaggggtt cagatgtggc gggtagggc
840
cctggaaagtc tcccaggatct tccctccctc ctctgatggta tggcttgcag ggcagccct
900
ggtaaccagc ccagtcaggc cccagccccg tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggagggc gggagctacg ggcaggagga agaattttgt agagctgcca
1020

gcgctcccc agttcaccc acccaggctt caccagccct gtgcgggctc tggggcaga
 1080
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa acaaaagctt
 1140
 gaacttgcca cttcagcggg gagatgagag gcaggtgcac tcagctgcac tgcccagagc
 1200
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca
 1260
 aatgtgacaa ttttactaaa taaagaattt tggagttgt tacccttcaa aaaaaagtcg
 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
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Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
					20				25					30	
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
					35			40				45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Arg	Arg	Ala	
					50			55			60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Ala	Gly	Ala	
65					70			75			80				
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
					85			90			95				
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Gln		
					100			105			110				
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
					115			120			125				
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
					130			135			140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150				155				160		
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
					165			170			175				
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
					180			185			190				
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
					195			200			205				
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
					210			215			220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230				235			240			
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
					245										

<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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agaaaaccttgg tgagaaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg
120
ggtttgttcc tcctttctt cgttctgccc gtccgaagca atgtgctaaa gggtgctatc
180
caggaccgcg taggtctcct ttaccagttt gtgggcgcac cccccgtacac aggcatgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttagcgtt
360
gttgccacca tgatttcag cagtgtgtgc tactggacgc tgggcttaca tcctgagggtt
420
gccccgattgg gt
432

<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

Lys	Thr	Lys	Asp	Ser	Pro	Gly	Val	Phe	Ser	Lys	Leu	Gly	Val	Leu	Leu		
1										10					15		
Arg	Arg	Val	Thr	Arg	Asn	Leu	Val	Arg	Asn	Lys	Leu	Ala	Val	Ile	Thr		
														20	25	30	
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val		
														35	40	45	
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val		
														50	55	60	
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu		
														65	70	75	80
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu		
														85	90	95	
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala		
														100	105	110	
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser		
														115	120	125	
Val	Cys	Tyr	Trp	Thr	Leu	Gly	Leu	His	Pro	Glu	Val	Ala	Arg	Leu	Gly		
														130	135	140	

<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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60

acgaaaataca aaataaagagg caggaagagg ccaaagcatc agaaaatgtgc cagttataat
 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgtag gatctgcctc
 180
 acagacatgc tcccaggaca ctgcacagca aggaggtacg gcggggccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagaaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggccctccctc agccccacac
 360
 cccaccagg caggagcggt gcctggcccg gggcaggcgg gtgggagagc tcactgagtg
 420
 ggcagcaggg catggccct gatgctgcag gtacccagge tgcaagctgca gaaacctcag
 480
 tgggaaccca gg
 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
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Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
						20			25				30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
							35		40			45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
							50		55			60			
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
							65		70			75			80
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
							85			90			95		
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
							100			105					

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 ttccccaccc tttggtctgg ggcaaggagt acttacggag tgacaaaggg aaaagtctgc
 120
 tttgaggcaa aggttaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtggtctgt tgattttcc cgtccacagc ttggtaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

acttttgggg agaatgatgt tattggctgc tttgctaatt ttgagactga agaagtagaa
 360
 ctttccttct ccaagaatgg agaagaccta ggtgtggcat tctggatcag caaggattcc
 420
 ctggcagacc gggcccttct accccatgtc ctctgcaaaa attgtgttgtt agaattaaac
 480
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 540
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag
 600
 gtgattctga tggtggact acccgatct ggaaagaccc agtgggcact gaaatatgca
 660
 aaagaaaacc ctgagaaaag atacaatgtc ctggagactg agactgtgct caatcaaatg
 720
 aggatgaagg gtctcgagga gccagagatg gaccccaaaa gccgagacct ttagttcag
 780
 caagcctccc agtgccttag taagctggtc cagattgctt cccggacaaa gaggaacttt
 840
 attcttgate agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag
 900
 accttccttc gaaaaagtggt ggtggttgtc cctaatgagg aaga
 944

<210> 3244
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 3244
 Asp Leu His Phe Gln Val Ser Lys Asp Arg Tyr Gly Gly Gln Pro Leu
 1 5 10 15
 Phe Ser Glu Lys Phe Pro Thr Leu Trp Ser Gly Ala Arg Ser Thr Tyr
 20 25 30
 Gly Val Thr Lys Gly Lys Val Cys Phe Glu Ala Lys Val Thr Gln Asn
 35 40 45
 Leu Pro Met Lys Glu Gly Cys Thr Glu Val Ser Leu Leu Arg Val Gly
 50 55 60
 Trp Ser Val Asp Phe Ser Arg Pro Gln Leu Gly Glu Asp Glu Phe Ser
 65 70 75 80
 Tyr Gly Phe Asp Gly Arg Gly Leu Lys Ala Glu Asn Gly Gln Phe Glu
 85 90 95
 Glu Phe Gly Gln Thr Phe Gly Glu Asn Asp Val Ile Gly Cys Phe Ala
 100 105 110
 Asn Phe Glu Thr Glu Glu Val Glu Leu Ser Phe Ser Lys Asn Gly Glu
 115 120 125
 Asp Leu Gly Val Ala Phe Trp Ile Ser Lys Asp Ser Leu Ala Asp Arg
 130 135 140
 Ala Leu Leu Pro His Val Leu Cys Lys Asn Cys Val Val Glu Leu Asn
 145 150 155 160
 Phe Gly Gln Lys Glu Glu Pro Phe Phe Pro Pro Pro Glu Glu Phe Val
 165 170 175
 Phe Ile His Ala Val Pro Val Glu Glu Arg Val Arg Thr Ala Val Pro
 180 185 190
 Pro Lys Thr Ile Glu Glu Cys Glu Val Ile Leu Met Val Gly Leu Pro

195	200	205
Gly Ser Gly Lys Thr Gln Trp Ala Leu Lys Tyr Ala Lys Glu Asn Pro		
210	215	220
Glu Lys Arg Tyr Asn Val Leu Gly Ala Glu Thr Val Leu Asn Gln Met		
225	230	235
Arg Met Lys Gly Leu Glu Pro Glu Met Asp Pro Lys Ser Arg Asp		
245	250	255
Leu Leu Val Gln Gln Ala Ser Gln Cys Leu Ser Lys Leu Val Gln Ile		
260	265	270
Ala Ser Arg Thr Lys Arg Asn Phe Ile Leu Asp Gln Cys Asn Val Tyr		
275	280	285
Asn Ser Gly Gln Arg Arg Lys Leu Leu Leu Phe Lys Thr Phe Ser Arg		
290	295	300
Lys Val Val Val Val Val Pro Asn Glu Glu		
305	310	

<210> 3245

<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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 ctcagctgga tgaggatggg gatttggacg tggtgagaag accacgagcc gcctctgatt
 120
 ccaaccgcagc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag
 180
 acgacgtcct gggagaggaa gcacaaggca gcccgacacga tatcatcaga ataggtgtgg
 240
 cggggcgccc tgctcctggc agactacatc ctgttccgac aggaccttt ccgaggatgt
 300
 acagcgctgg agctcggggc cggcacgggg ctcgctagca tcatcgac caccatggca
 360
 cggaccgttt attgtacaga tgcggtgca gatctttgt ccatgtgcc acaaaccatt
 420
 gcccctaaca gccacactggc tgccactgga ggtggtatag ttagggtcaa agaactggac
 480
 tggctgaagg acgacactctg cacagatccc aaggtccct tcagttggc acaagaggaa
 540
 atttctgacc tgtacgtca caccaccatc ctgtttgcag ccgaagtgtt ttacgacgac
 600
 gacttgactg atgctgtgtt taaaacgctc tcccgactcg cccacagatt gaaaaatgcc
 660
 tgcacagcca tactgtcggt ggagaagagg ctcaacttca cactgagaca cttggacgac
 720
 acatgtgaag cttacgatca cttccgttcc tgctgcacg cgctggagca gctcacagat
 780
 ggcaagctgc gcttcgttgt ggagccctgt gagggctcct tcccacagct cctggttac
 840
 gagcgccctcc agcagctgga gctctggaag atcatcgac aaccagtaac atgacccatc
 900
 gcctccacca ggccggcggt ctcgactgtt ctttagagtgt atttcttagta aaatcagaag
 960

ctcaccaaaag caaaaaaaaa
980

<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

Val	Trp	Arg	Gly	Ala	Leu	Leu	Leu	Ala	Asp	Tyr	Ile	Leu	Phe	Arg	Gln
1				5					10				15		
Asp	Leu	Phe	Arg	Gly	Cys	Thr	Ala	Leu	Glu	Leu	Gly	Ala	Gly	Thr	Gly
				20					25				30		
Leu	Ala	Ser	Ile	Ile	Ala	Ala	Thr	Met	Ala	Arg	Thr	Val	Tyr	Cys	Thr
				35					40				45		
Asp	Val	Gly	Ala	Asp	Leu	Leu	Ser	Met	Cys	Gln	Arg	Asn	Ile	Ala	Leu
				50					55				60		
Asn	Ser	His	Leu	Ala	Ala	Thr	Gly	Gly	Ile	Val	Arg	Val	Lys	Glu	
				65					70				75		80
Leu	Asp	Trp	Leu	Lys	Asp	Asp	Leu	Cys	Thr	Asp	Pro	Lys	Val	Pro	Phe
					85					90				95	
Ser	Trp	Ser	Gln	Glu	Glu	Ile	Ser	Asp	Leu	Tyr	Asp	His	Thr	Thr	Ile
					100					105				110	
Leu	Phe	Ala	Ala	Glu	Val	Phe	Tyr	Asp	Asp	Asp	Leu	Thr	Asp	Ala	Val
					115					120				125	
Phe	Lys	Thr	Leu	Ser	Arg	Leu	Ala	His	Arg	Leu	Lys	Asn	Ala	Cys	Thr
					130					135				140	
Ala	Ile	Leu	Ser	Val	Glu	Lys	Arg	Leu	Asn	Phe	Thr	Leu	Arg	His	Leu
					145					150				160	
Asp	Val	Thr	Cys	Glu	Ala	Tyr	Asp	His	Phe	Arg	Ser	Cys	Leu	His	Ala
					165					170				175	
Leu	Glu	Gln	Leu	Thr	Asp	Gly	Lys	Leu	Arg	Phe	Val	Val	Glu	Pro	Val
					180					185				190	
Glu	Ala	Ser	Phe	Pro	Gln	Leu	Leu	Val	Tyr	Glu	Arg	Leu	Gln	Gln	Leu
					195					200				205	
Glu	Leu	Trp	Lys	Ile	Ile	Ala	Glu	Pro	Val	Thr					
					210					215					

<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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cgcaacatcg	tggccaaccg	cctggcctcg	gatggggcca	cctggcaga	catcttcaag
120					
aggttcaaca	gcggcacgta	taacaaccag	tggatgatcg	tggactacaa	ggcgttcatc
180					
ccgggtgggc	ccagccccgg	gagccgggtg	cttaccatcc	tggagcagat	ccccggcatg
240					
gtgggtggtgg	ctgacaagac	ctcggagtc	taccagaaga	cctactgggc	cagctacaac
300					

ataccgtcct tcgagactgt gttcaatgcc agtgggctgc aggcctagt ggcccagtat
 360
 ggggactggt tttcttatga cgggagcccc cgggcccaga tcttcggcg gaaccagtca
 420
 ctggtacaag acatggactc catggtcagg ctgatgaggt acaatgactt cctccatgac
 480
 cctctgtcac tgtgcaaagc ctgcaacccc cagcccaatg gggagaatgc tatctccgcc
 540
 cgctccgacc tcaacccggc caatggctcc tacccttcc aggcctacg tcagcgctcc
 600
 catggggta tcgatgtgaa ggtgaccaggc atgtcaactgg ccaggatcct gagcctgctg
 660
 gcggccagcg gtcccacgtg ggaccaggtg ccccccgttcc agtggagcac ctgccttc
 720
 agcggcctgc tgcacatggg ccagccagac ctctggaagt tcgcgcctgt caaggttca
 780
 tgggactgaa gttctgtccc tgctctgctg ctttcgcccc tgctgaccct cgtcagggtc
 840
 acccccgtcc caaggccacc ggacttctaa ctccagcccc tcctggggc ttctttctct
 900
 gatctgggt ctgagtcate tcctcttaga gtgggtcacg aacctgatgg ggctcagaac
 960
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 977

<210> 3248
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 3248
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 Trp Val Arg Asn Ile Val Ala Asn Arg Leu Ala Ser Asp Gly Ala Thr
 20 25 30
 Trp Ala Asp Ile Phe Lys Arg Phe Asn Ser Gly Thr Tyr Asn Asn Gln
 35 40 45
 Trp Met Ile Val Asp Tyr Lys Ala Phe Ile Pro Gly Gly Pro Ser Pro
 50 55 60
 Gly Ser Arg Val Leu Thr Ile Leu Glu Gln Ile Pro Gly Met Val Val
 65 70 75 80
 Val Ala Asp Lys Thr Ser Glu Leu Tyr Gln Lys Thr Tyr Trp Ala Ser
 85 90 95
 Tyr Asn Ile Pro Ser Phe Glu Thr Val Phe Asn Ala Ser Gly Leu Gln
 100 105 110
 Ala Leu Val Ala Gln Tyr Gly Asp Trp Phe Ser Tyr Asp Gly Ser Pro
 115 120 125
 Arg Ala Gln Ile Phe Arg Arg Asn Gln Ser Leu Val Gln Asp Met Asp
 130 135 140
 Ser Met Val Arg Leu Met Arg Tyr Asn Asp Phe Leu His Asp Pro Leu
 145 150 155 160
 Ser Leu Cys Lys Ala Cys Asn Pro Gln Pro Asn Gly Glu Asn Ala Ile
 165 170 175
 Ser Ala Arg Ser Asp Leu Asn Pro Ala Asn Gly Ser Tyr Pro Phe Gln

180	185	190
Ala Leu Arg Gln Arg Ser His Gly Gly Ile Asp Val Lys Val Thr Ser		
195	200	205
Met Ser Leu Ala Arg Ile Leu Ser Leu Leu Ala Ala Ser Gly Pro Thr		
210	215	220
Trp Asp Gln Val Pro Pro Phe Gln Trp Ser Thr Ser Pro Phe Ser Gly		
225	230	235
Leu Leu His Met Gly Gln Pro Asp Leu Trp Lys Phe Ala Pro Val Lys		
245	250	255
Val Ser Trp Asp		
260		

<210> 3249

<211> 4487

<212> DNA

<213> Homo sapiens

<400> 3249
nngaattctt tgcatttttc tgggtggagaa actgaggctc agagattagg taacttgtct
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taatcagcag atggcagcac tggtaacttga acccaggctt gtgtgaaccg ccccacccct
120
gctcttcact tttatgcttt ccaccagagt aataatggaa atcctggaaa gccttctcct
180
ttccccatggg ttcccactga ttgctttct ctctctctct ccccacccca ctccaggtgc
240
tctggggcca ggtgccaccg gccattgtcc aggtagctgt gtgcaagcca aagaagcatg
300
tggacactgg aagactcctc ggggacagtc ctgcacccgcc tcattccagga gcagctgcgc
360
tacggcaacc tgactgagac ggcacgctg ctagccatcc agcagcaggc cctgaggggt
420
ggggctggaa ctgggggtac agggagccccc caggcctccc tggagatcct ggccccagag
480
480
gacagtcagg tgctgcagca ggccaccagg caggagccccc agggccagga gcaccaggc
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600
600
gaggagctgc ccaccttatga ggaggccaaa gcccactcgc agtactatgc ggcccagcag
660
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gcagggaccc ggccacatgc gggggaccga gatccccgtg gggccccggg aggcagtcgg
720
720
aggcaggacg agggccctgcg ggagctgagg catgggcacg tgcgctcggt gagtgaacgg
780
780
ctccttcagt tgtccctgga gaggaacggc gcccggccccc ccagccacat gagctcctcc
840
840
cacagcttcc cacagctggc cgcacaccag cagggccccc cactgagggg ccccccctgt
900
900
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960
960
accaccactg ctgtcactga cccacggta cgtccccgcg gcagccgcga cttccagcat
1020
1020
gctgaagtca ggatcctgca ggcccagggtg cctccctgtgt tcctccaaca gcagcagcag
1080

taccagtacc tgcagcaatc tcaggagcac cccccctcccc cacatccagc tgctctcgcc
1140
catggccccc tgagctccct cagtcacact gctgtggagg ggccagttag tgcccaggcc
1200
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1260
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1320
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1380
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1440
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1560
aagctgcttg ctcagagcta cgaacagcag caggagcaag agaagctgga gcgagagatg
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1680
ctggcaatg cgcaggcccg ggcagctcga gccgaagagg agctgcgcaa gaagcaggcc
1740
tatgtggaga aagtggagcg gctgcagcag gcgcctggc agctgcagggc agcctgtgag
1800
aagcgggagc agctggagct gcgtctgcgg actcgccctgg agcaggaact caaggccctg
1860
cgtgcacagc agagacagggc aggtgcggca ggtggtagca gtggcagtgg tgggtctcca
1920
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<210> 3250
 <211> 849
 <212> PRT
 <213> Homo sapiens

<400> 3250
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 35 40 45
 Arg Cys Ser Gly Ala Arg Cys His Arg Pro Leu Ser Arg Gln Leu Cys
 50 55 60
 Ala Ser Gln Arg Ser Met Trp Thr Leu Glu Asp Ser Ser Gly Thr Val
 65 70 75 80
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 85 90 95
 Thr Arg Thr Leu Leu Ala Ile Gln Gln Ala Leu Arg Gly Gly Ala
 100 105 110
 Gly Thr Gly Gly Thr Gly Ser Pro Gln Ala Ser Leu Glu Ile Leu Ala
 115 120 125
 Pro Glu Asp Ser Gln Val Leu Gln Gln Ala Thr Arg Gln Glu Pro Gln
 130 135 140
 Gly Gln Glu His Gln Gly Gly Glu Asn His Leu Ala Glu Asn Thr Leu
 145 150 155 160
 Tyr Arg Leu Cys Pro Gln Pro Ser Lys Gly Glu Glu Leu Pro Thr Tyr
 165 170 175
 Glu Glu Ala Lys Ala His Ser Gln Tyr Tyr Ala Ala Gln Gln Ala Gly
 180 185 190
 Thr Arg Pro His Ala Gly Asp Arg Asp Pro Arg Gly Ala Pro Gly Gly
 195 200 205
 Ser Arg Arg Gln Asp Glu Ala Leu Arg Glu Leu Arg His Gly His Val
 210 215 220
 Arg Ser Leu Ser Glu Arg Leu Leu Gln Leu Ser Leu Glu Arg Asn Gly
 225 230 235 240
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 245 250 255
 Ala Arg Asn Gln Gln Gly Pro Pro Leu Arg Gly Pro Pro Ala Glu Gly
 260 265 270
 Pro Glu Ser Arg Gly Pro Pro Pro Gln Tyr Pro His Val Val Leu Ala
 275 280 285
 His Glu Thr Thr Ala Val Thr Asp Pro Arg Tyr Arg Ala Arg Gly
 290 295 300
 Ser Pro His Phe Gln His Ala Glu Val Arg Ile Leu Gln Ala Gln Val
 305 310 315 320
 Pro Pro Val Phe Leu Gln Gln Gln Gln Tyr Gln Tyr Leu Gln Gln

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Ser Gln Glu His Pro Pro Pro Pro His Pro Ala Ala Leu Gly His Gly			
340	345	350	
Pro Leu Ser Ser Leu Ser Pro Pro Ala Val Glu Gly Pro Val Ser Ala			
355	360	365	
Gln Ala Ser Ser Ala Thr Ser Gly Ser Ala His Leu Ala Gln Met Glu			
370	375	380	
Ala Val Leu Arg Glu Asn Ala Arg Leu Gln Arg Asp Asn Glu Arg Leu			
385	390	395	400
Gln Arg Glu Leu Glu Ser Ser Ala Glu Lys Ala Gly Arg Ile Glu Lys			
405	410	415	
Leu Glu Ser Glu Ile Gln Arg Leu Ser Glu Ala His Glu Ser Leu Thr			
420	425	430	
Arg Ala Ser Ser Lys Arg Glu Ala Leu Glu Lys Thr Met Arg Asn Lys			
435	440	445	
Met Asp Ser Glu Met Arg Arg Leu Gln Asp Phe Asn Arg Asp Leu Arg			
450	455	460	
Glu Arg Leu Glu Ser Ala Asn Arg Arg Leu Ala Ser Lys Thr Gln Glu			
465	470	475	480
Ala Gln Ala Gly Ser Gln Asp Met Val Ala Lys Leu Leu Ala Gln Ser			
485	490	495	
Tyr Glu Gln Gln Gln Glu Gln Glu Lys Leu Glu Arg Glu Met Ala Leu			
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515	520	525	
Gln Ala Leu Gly Asn Ala Gln Gly Arg Ala Ala Arg Ala Glu Glu Glu			
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Leu Arg Lys Lys Gln Ala Tyr Val Glu Lys Val Glu Arg Leu Gln Gln			
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Ala Leu Gly Gln Leu Gln Ala Ala Cys Glu Lys Arg Glu Gln Leu Glu			
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Leu Arg Leu Arg Thr Arg Leu Glu Gln Glu Leu Lys Ala Leu Arg Ala			
580	585	590	
Gln Gln Arg Gln Ala Gly Ala Pro Gly Gly Ser Ser Gly Ser Gly Gly			
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Ser Pro Glu Leu Ser Ala Leu Arg Leu Ser Glu Gln Leu Arg Glu Lys			
610	615	620	
Glu Glu Gln Ile Leu Ala Leu Glu Ala Asp Met Thr Lys Trp Glu Gln			
625	630	635	640
Lys Tyr Leu Glu Glu Arg Ala Met Arg Gln Phe Ala Met Asp Ala Ala			
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Ala Thr Ala Ala Ala Gln Arg Asp Thr Thr Leu Ile Arg His Ser Pro			
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Gln Pro Ser Pro Ser Ser Phe Asn Glu Gly Leu Leu Thr Gly Gly			
675	680	685	
His Arg His Gln Glu Met Glu Ser Arg Leu Lys Val Leu His Ala Gln			
690	695	700	
Ile Leu Glu Lys Asp Ala Val Ile Lys Val Leu Gln Gln Arg Ser Arg			
705	710	715	720
Arg Asp Pro Gly Lys Ala Ile Gln Gly Ser Leu Arg Pro Ala Lys Ser			
725	730	735	
Val Pro Ser Val Phe Ala Ala Ala Ala Gly Thr Gln Gly Trp Gln			
740	745	750	
Gly Leu Ser Ser Ser Glu Arg Gln Thr Ala Asp Ala Pro Ala Arg Leu			

755	760	765
Thr Thr Ala Asp Arg Ala Pro Thr Glu Glu Pro Val Val Thr Ala Pro		
770	775	780
Pro Ala Ala His Ala Lys His Gly Ser Arg Asp Gly Ser Thr Gln Thr		
785	790	795
Asp Gly Pro Pro Asp Ser Thr Ser Thr Cys Leu Pro Pro Glu Pro Asp		800
805	810	815
Ser Leu Leu Gly Cys Ser Ser Ser Gln Arg Ala Ala Ser Leu Asp Ser		
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Val Ala Thr Ser Arg Val Gln Asp Leu Ser Asp Met Val Glu Ile Leu		
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<210> 3251
<211> 2595
<212> DNA
<213> Homo sapiens

<400> 3251
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180
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<210> 3252
<211> 254
<212> PRT
<213> Homo sapiens

<400> 3252

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Val	Val	Asp	Leu	Ile	Phe	Leu	Asn	Thr	Glu	Val	Ser	Leu	Ser	Gln	Ala
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Leu	Glu	Asp	Val	Ser	Arg	Gly	Gly	Ser	Pro	Phe	Ala	Ile	Val	Ile	Thr
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Gln	Gln	His	Gln	Ile	His	Arg	Ser	Cys	Thr	Val	Asn	Ile	Met	Phe	Gly
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Thr	Pro	Gln	Glu	His	Arg	Asn	Met	Pro	Gln	Ala	Asp	Ala	Met	Val	Leu
								85		90				95	
Val	Ala	Arg	Asn	Tyr	Glu	Arg	Tyr	Lys	Asn	Glu	Cys	Arg	Glu	Lys	Glu
								100		105				110	
Arg	Glu	Glu	Ile	Ala	Arg	Gln	Ala	Ala	Lys	Met	Ala	Asp	Glu	Ala	Ile
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Leu	Gln	Glu	Arg	Glu	Arg	Gly	Gly	Pro	Glu	Glu	Gly	Val	Arg	Gly	Gly
								130		135				140	
His	Pro	Pro	Ala	Ile	Gln	Ser	Leu	Ile	Asn	Leu	Leu	Ala	Asp	Asn	Arg
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Tyr	Leu	Thr	Ala	Glu	Glu	Thr	Asp	Lys	Ile	Ile	Asn	Tyr	Leu	Arg	Glu
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Arg	Lys	Glu	Arg	Leu	Met	Arg	Ser	Ser	Thr	Asp	Ser	Leu	Pro	Gly	Glu
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Leu	Arg	Gly	Arg	Pro	Arg	Pro	Asp	Phe	Pro	Pro	Thr	Thr	Arg	Gly	Asp
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Leu	Gly	Cys	Leu	Ala	Glu	Asp	Thr	Ala	Lys	Leu	Pro	Thr	Ala	Pro	Glu
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Arg	Pro	Ser	Ala	Pro	Leu	Cys	Tyr	Thr	His	Ser	Ile	Cys	Thr	Pro	His
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<210> 3253
<211> 686
<212> DNA
<213> Homo sapiens

<400> 3253

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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
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Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
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Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
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Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
					85				90					95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
					100				105					110	
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
					115				120					125	
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
					130			135						140	
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
					145			150			155			160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
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Pro	Phe	Tyr	Gln												
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<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 480
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<210> 3256
<211> 169
<212> PRT
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<400> 3256
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 35 40 45
 Pro Asn Gly Asp Thr Tyr Glu Gly Ser Tyr Glu Phe Gly Lys Arg His
 50 55 60
 Gly Gln Gly Ile Tyr Lys Phe Lys Asn Gly Ala Arg Tyr Ile Gly Glu
 65 70 75 80
 Tyr Val Arg Asn Lys Lys His Gly Gln Gly Thr Phe Ile Tyr Pro Asp
 85 90 95
 Gly Ser Arg Tyr Glu Gly Glu Trp Ala Asn Asp Leu Arg His Gly His
 100 105 110
 Gly Val Tyr Tyr Tyr Ile Asn Asn Asp Thr Tyr Thr Gly Glu Trp Phe
 115 120 125
 Ala His Gln Arg His Gly Gln Gly Thr Tyr Leu Tyr Ala Glu Thr Gly
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165

<210> 3257

<211> 368

<212> DNA

<213> Homo sapiens

<400> 3257

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120

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180

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240

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368

<210> 3258

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3258

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15

Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu

20

25

30

Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser

35

40

45

Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser

50

55

60

Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg

65

70

75

80

Phe Ser Ser Gly Gly Glu Asp Asp Phe Asp Arg Ser Met His Lys

85

90

95

Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala

100

105

110

Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg

115

120

<210> 3259

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3259

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 180
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 240
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 300
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 360
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 420
 gctgcggctg caccccgagg cactgaacct gtcactggat gagctgccgc cggccctgag
 480
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 720
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 747

<210> 3260
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 3260
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 20 25 30
 Gly Ser Glu Val Asp Arg Val Ile Leu Lys Ala Asn Glu Thr Phe Ala
 35 40 45
 Phe Val Gly Asn Val Thr His Tyr Ala Gln Val Trp Leu Asn Ile Ser
 50 55 60
 Ala Glu Ile Arg Ser Phe Leu Glu Gln Gly Arg Leu Gln Gln His Leu
 65 70 75 80
 Arg Trp Leu Gln Gln Tyr Val Ala Glu Leu Arg Leu His Pro Glu Ala
 85 90 95
 Leu Asn Leu Ser Leu Asp Glu Leu Pro Pro Ala Leu Arg Gln Asp Asn
 100 105 110
 Phe Ser Leu Pro Ser Gly Met Ala Leu Leu Gln Gln Leu Asp Thr Ile
 115 120 125
 Asp Asn Ala Ala Cys Gly Trp Ile Gln Phe Met Ser Lys Val Ser Val
 130 135 140
 Asp Ile Phe Lys Gly Phe Pro Asp Glu Glu Ser Ile Val Asn Tyr Thr
 145 150 155 160
 Leu Asn Gln Ala Tyr Gln Asp Asn Val Thr Val Phe Ala Ser Val Ile
 165 170 175
 Phe Gln Thr Arg Lys Asp Gly Ser Ser Arg Leu Thr Cys Thr Thr Arg

180 Ser Ala Arg Thr Pro 195	185	190
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<210> 3261
<211> 1323
<212> DNA
<213> Homo sapiens

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180
tgatgatttc ctttgttccg gtgttctgtc tcccccctcgct ggctgtgtgg gggctgcctg
240
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300
gaggtgtggc tcaggaccga cctgaagggt gatgatctgg aggagggtgt cacaagtgaa
360
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420
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480
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600
cacggcctgc acacctgtgt ttccatggaa atgccaccgt gtctgtcccc aggccctcca
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720
gactctctcc cctccacca tggggccctc tgcccatgtt tccctccagg aagagcgggc
780
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900
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960
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1140
gctggctcag cagccgagcc tggcaccggag ggtccctgca ggctccctgg gcagggagag
1200
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1320

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aaa
1323

<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
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Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu
20 25 30
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val
35 40 45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
50 55 60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65 70 75 80
Leu

<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 3263
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gccagggaaac ctggccagaa ggagaagaga gtgcggcccg aggagaagca acaagccaaag
240
cccggtgaagg tggagcggac ccggaagcgg tccgagggct tctcgatgga caggaaggta
300
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag
360
tttgcctaa aggtcgacag cccggacgtg aaggggtgcc tgaatgcctt agaggagctg
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480
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660
gaggcccccc aggagaaggc ggaggacaag cccagcaccc atctctcagc cccagtgaat
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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

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						20			25				30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
						35			40			45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
						50			55			60			
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65						70			75			80			
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
						85			90			95			
Asp	Arg	Lys	Val	Glu	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu	
						100			105			110			
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
						115			120			125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
						130			135			140			
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145						150			155			160			
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
						165			170			175			
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
						180			185			190			
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
						195			200			205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
						210			215			220			
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225						230			235			240			
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
						245			250			255			
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
						260			265			270			
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

275	280	285
Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser	Glu Ala Leu	
290	295	300
Asp Glu Glu Ser		
305		
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<211> 524		
<212> DNA		
<213> Homo sapiens		
<400> 3265		
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120		
gagaaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa		
180		
ggtacattat tgttgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca		
240		
gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac		
300		
ttcaagaaga aaagaagtaa gtttagagaaa gtaccgctgg gccctgtgc acggtgctgg		
360		
ttgcccaggc gcatgcggac ggagggtgtg gggcacgtgg gtctcgggac aggaagccca		
420		
ggcaggcttc aacctggctg ccactgcccc cttgccaccc tcatcctaga gggagcaccc		
480		
agagggtcca gcctcgctcc ctttcctc cacgctccac gcgt		
524		
<210> 3266		
<211> 82		
<212> PRT		
<213> Homo sapiens		
<400> 3266		
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Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg		
20	25	30
Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro		
35	40	45
Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu		
50	55	60
Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala		
65	70	75
Pro Arg		80
<210> 3267		
<211> 393		
<212> DNA		
<213> Homo sapiens		

<400> 3267
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 120
 cattgtggga agtttcaaga tgccttgag ccattgctca gctggttggc agataccgag
 180
 gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc
 240
 300
 caagaacaga agttgctcca gcccgtccta gatgatcgaa aggccacagt agacatgctt
 360
 caagcagaag gaggcagaat agcccaagtca gcagagctgg ctgatagaga gaaaatcact
 ggacagctgg agagtcttga aagtagatgg act
 393

<210> 3268
<211> 131
<212> PRT
<213> Homo sapiens

<400> 3268
 Val Glu Tyr Ala Cys Arg Val Gln Gly Leu Glu His Asp Met Glu Glu
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 20 25 30
 Ala Gln Leu Gln Glu Ala Leu Leu His Cys Gly Lys Phe Gln Asp Ala
 35 40 45
 Leu Glu Pro Leu Leu Ser Trp Leu Ala Asp Thr Glu Glu Leu Ile Ala
 50 55 60
 Asn Gln Lys Pro Pro Ser Ala Glu Tyr Lys Val Val Lys Ala Gln Ile
 65 70 75 80
 Gln Glu Gln Lys Leu Leu Gln Arg Leu Leu Asp Asp Arg Lys Ala Thr
 85 90 95
 Val Asp Met Leu Gln Ala Glu Gly Arg Ile Ala Gln Ser Ala Glu
 100 105 110
 Leu Ala Asp Arg Glu Lys Ile Thr Gly Gln Leu Glu Ser Leu Glu Ser
 115 120 125
 Arg Trp Thr
 130

<210> 3269
<211> 1423
<212> DNA
<213> Homo sapiens

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 120
 aaatatagga tgtgaaagcg aaaaaatatc tggtagcaa gtgaggtgta ctcaaaaata
 180

agcaaaagtc acgtgggtct gatTTTatac cctcgctgga aagcttgttc tcagacacac
 240
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 300
 tagacttga ggtggaccct ggctcccagg gctgtgtact cccagccgt gtttctctt
 360
 tgctcagact gaacaagtgg aacgaaatta catTAAGAA aagaaggcag cagtGAAAGA
 420
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 480
 gaaaatgatt gaaaacgaaa tgctgacaAT ggaACTGAAT ggAGATTCTA tggaggtgaa
 540
 acctatcatg accagaaAGT tgcggaggcg accaaATGAT cccgtccccca tcccagacaa
 600
 gaggaggaaa CCTGCTCCAG CCCAGCTAAA CTATTTGTtA acAGATGAAC agATCATGGa
 660
 ggtatctgaga acattaaATA agCTTAAGTC ACCAAGAGA CCAGCATCTC CATCCTCTCC
 720
 tgagcacTTG CCTGCAACAC CCGCGGAATC TCCAGCACAG AGATTTGAGG CGCGGATAGA
 780
 agatGGCAAA CTGTATTATG ACAAAAGATG GTACCACAAG AGCCAGGCCA TCTATCTGGA
 840
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 900
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 960
 gCTCTTCGTG ATCCGCCGGC GCTCAGCTGC TTGACTTTCT acAGTGTCT TCTCTTGACC
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 1080
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 1140
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 1200
 agacatcAGT caccatgaga CTGTTTACT TTCAGGCgTA TTGGGGGTT TGATTACTT
 1260
 TCCTTTATT TCTTATTtTT TTGCTTATAc TTGTTTTGA AAACCTCCTC TGAGTTGAA
 1320
 gggacagCTA TTTTATTGA TTATCTTAA GTCTCTAC CATGGAGAAG AGCAGGAAGG
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 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

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Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
					20				25						30
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

35	40	45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu		
50	55	60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu		
65	70	75
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala		
85	90	95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys		
100	105	110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys		
115	120	125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser		
130	135	140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu		
145	150	155
Phe Val Ile Arg Arg Ser Ala Ala		
165		

<210> 3271

<211> 464

<212> DNA

<213> Homo sapiens

<400> 3271

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 120
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 180
 atgagaaggg ccccgccagc aagagatcca atgatggtgg ccgcaggat cccagcgttg
 240
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 300
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 464

<210> 3272

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3272

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 20 25 30
 Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
 35 40 45
 Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

50	55	60
Ile Leu Ala Ala Thr Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu		
65	70	75
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln		80
85	90	95
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu		
100	105	110
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met		
115	120	125
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His		
130	135	140

<210> 3273

<211> 387

<212> DNA

<213> Homo sapiens

<400> 3273

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120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa ctttcatga atggatgaa acaagcaacc acctctggct agtggtgaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
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387

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<210> 3274

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3274

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20	25	30	
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr			
35	40	45	
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr			
50	55	60	
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu			
65	70	75	80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn			
85	90	95	
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly			
100	105	110	
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu			

115 120 125
Gly

<210> 3275
<211> 1266
<212> DNA
<213> Homo sapiens

<400> 3275
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120
ttttcttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga
180
agcgtccggt ggcggctta gttaggagct atggctaaac atcatcotga ttgatctt
240
tgccgcaagc aggctggtgt tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt
300
gtgattgtg actcctatgt gcgtccctgc actctggcgc gcatatgtga tgagtgtaac
360
tatggatctt accagggcg ctgtgtgatc tgtggaggac ctgggtctc tgatgcctat
420
tattgttaagg agtgcaccat ccaggagaag gacagagatg gctgccaaa gattgtcaat
480
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540
tgattggtgg gtggccctt cctccccca acatcagtct gctgcagctg ccagaaaaca
600
tgcctactac taccagcaga aaggagcag agcccagagc atcaccagga gtgcctgcta
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720
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900
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960
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1020
ttgggggggg ggtgggggggg cagggctctg ccctcttcaa aggcatttac ttgtttaaca
1080
cttgcacgc tacagtgggg tacagtagct ggctattcac aggcatcatc atagcccact
1140
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<210> 3276
<211> 110
<212> PRT
<213> Homo sapiens

<400> 3276
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Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu
35 40 45
Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro
50 55 60
Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys
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Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr
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Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg
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<210> 3277
<211> 1435
<212> DNA
<213> Homo sapiens

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240
gacgcccggg tcaggacgtc gaagccaaag aagaccagag ccagccgggtt ggcacagcgg
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420
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480
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720
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780

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 1020
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 1080
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 1140
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 1200
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 1320
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<210> 3278
 <211> 104
 <212> PRT
 <213> Homo sapiens

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 Met His Glu Asn Pro Glu Trp Glu Lys Ala Arg Gln Ala Leu Ala Ser
 35 40 45
 Ile Ser Lys Ser Gly Ala Ala Gly Gly Ser Ala Lys Ser Ser Ser Asn
 50 55 60
 Gly Pro Val Ala Ser Ala Ser Thr Cys Pro Arg Gln Lys Pro Gln Leu
 65 70 75 80
 Cys Ser Ser Ser Ser Thr Ser Gly Thr Ser Ser Thr Thr Met Pro
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 Thr Pro Thr Ala Thr Thr Ile Pro
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<210> 3279
 <211> 1130
 <212> DNA
 <213> Homo sapiens

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 240
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac
 300
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 360
 gccctgcagc gtgagatcct gctccagggc cgccctctacc tctctgagaa ctggatctgc
 420
 ttctacagca acatcttccg ctgggagacc acgatctcca tccagctgaa ggaagtgaca
 480
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 780
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 840
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 900
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 960
 ccgggtggctg aaccccccag cacagagccc acccagcctg acggggccac caccctggc
 1020
 cccttggatc tgctgcccag tgaggagcta ttgacagaca caagtaactc ctcttcattc
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<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

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								20		25			30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
								35		40		45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
								50		55		60			
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65								70		75			80		
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
								85		90		95			
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

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Gln Gly Arg Leu Tyr Leu Ser Glu Asn Trp Ile Cys Phe Tyr Ser Asn		
130	135	140
Ile Phe Arg Trp Glu Thr Thr Ile Ser Ile Gln Leu Lys Glu Val Thr		
145	150	155
Cys Leu Lys Lys Glu Lys Thr Ala Lys Leu Ile Pro Asn Ala Ile Gln		
165	170	175
Ile Cys Thr Glu Ser Glu Lys His Phe Phe Thr Ser Phe Gly Ala Arg		
180	185	190
Asp Arg Cys Phe Leu Leu Ile Phe Arg Leu Trp Gln Asn Ala Leu Leu		
195	200	205
Glu Lys Thr Leu Ser Pro Arg Glu Leu Trp His Leu Val His Gln Cys		
210	215	220
Tyr Gly Ser Glu Leu Gly Leu Thr Ser Glu Asp Glu Asp Tyr Val Ser		
225	230	235
Pro Leu Gln Leu Asn Gly Leu Gly Thr Pro Lys Glu Val Gly Asp Val		
245	250	255
Ile Ala Leu Ser Asp Ile Thr Ser Ser Gly Ala Ala Asp Arg Ser Gln		
260	265	270
Glu Pro Ser Pro Val Gly Ser Arg Arg Gly His Val Thr Pro Asn Leu		
275	280	285
Ser Arg Ala Ser Ser Asp Ala Asp His Gly Ala Glu Glu Asp Lys Glu		
290	295	300
Glu Gln Val Asp Ser Gln Pro Asp Ala Ser Ser Ser Gln Thr Val Thr		
305	310	315
Pro Val Ala Glu Pro Pro Ser Thr Glu Pro Thr Gln Pro Asp Gly Pro		
325	330	335
Thr Thr Leu Gly Pro Leu Asp Leu Leu Pro Ser Glu Glu Leu Leu Thr		
340	345	350
Asp Thr Ser Asn Ser Ser Ser Ser Thr Gly Glu Glu Ala Asp Leu Ala		
355	360	365
Ala Leu Leu Pro Asp Leu Ser Gly		
370	375	

<210> 3281

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3281

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240
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300
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360

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 842

<210> 3282
<211> 146
<212> PRT
<213> Homo sapiens

<400> 3282
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 35 40 45
Thr Ser Phe Ala Arg Gly Lys Glu His His Val Gly His Ile His Glu
 50 55 60
Gly Thr Gly Asn Ser Val Val Pro Ser Val Thr Pro Cys Gln Asp Thr
 65 70 75 80
Gln Asp Glu Asn Pro Ala Pro Glu Arg Ala Ala Gly Ile Ser Ser Thr
 85 90 95
His Thr Gln Ala Leu Cys Pro Gln Ala Pro Pro Ser Val Leu Pro Gly
 100 105 110
Asn Asn Thr Leu Cys Glu Pro Val Val Glu Pro Gly Thr Ala Trp Ala
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Arg Asp
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<210> 3283
<211> 3268
<212> DNA
<213> Homo sapiens

<400> 3283
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<210> 3284
 <211> 1012
 <212> PRT
 <213> Homo sapiens

<400> 3284
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 35 40 45
 Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met
 50 55 60
 Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln
 65 70 75 80
 Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg
 85 90 95
 Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met
 100 105 110
 Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys
 115 120 125
 Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr
 130 135 140
 Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln
 145 150 155 160
 Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser
 165 170 175
 Leu Arg Thr Glu Leu Gln Arg Ala His Ser Glu Arg Lys Ile Leu Glu
 180 185 190
 Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp
 195 200 205
 Leu Glu Gln Glu Asn Ala Leu Leu Lys Asp Glu Lys Glu Gln Leu Asn
 210 215 220
 Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val
 225 230 235 240
 Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Arg Ser Arg
 245 250 255
 Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp
 260 265 270
 Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg
 275 280 285
 Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro
 290 295 300
 Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln
 305 310 315 320
 Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe
 325 330 335
 Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys
 340 345 350
 Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val
 355 360 365
 Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

370	375	380
Leu Ala Tyr Asn Ser	Leu Lys Arg Gln Glu	Leu Glu Ser Glu Asn Lys
385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln
	405	410
Ala Thr Gln Asn Asn Ser Ser His	Gly Ser Pro Asp Ser	Tyr Ser Leu
	420	425
Leu Leu Asn Gln Leu Lys	Leu Ala His Glu Glu	Leu Glu Val Arg Lys
	435	440
Glu Glu Val Leu Ile	Leu Arg Thr Gln Ile Val	Ser Ala Asp Gln Arg
	450	455
Arg Leu Ala Gly Arg Asn Ala	Glu Pro Asn Ile Asn Ala	Arg Ser Ser
	465	470
Trp Pro Asn Ser Glu Arg His	Val Asp Gln Glu Asp Ala	Ile Glu Ala
	485	490
Tyr His Gly Val Cys Gln Thr Asn Arg	Leu Leu Glu Ala Gln	Leu Gln
	500	505
Ala Gln Ser Leu Glu His Glu	Glu Val Glu His Leu Lys	Ala Gln
	515	520
Leu Glu Ala Leu Lys Glu	Glu Met Asp Lys Gln	Gln Thr Phe Cys
	530	535
Gln Thr Leu Leu Leu Ser	Pro Glu Ala Gln Val	Glu Phe Gly Val Gln
	545	550
Gln Glu Ile Ser Arg Leu	Thr Asn Glu Asn Leu Asp	Leu Lys Glu Leu
	565	570
Val Glu Lys Leu Glu Lys Asn	Glu Arg Lys Leu Lys	Gln Leu Lys
	580	585
Ile Tyr Met Lys Lys Ala	Gln Asp Leu Glu Ala	Ala Gln Ala Leu Ala
	595	600
Gln Ser Glu Arg Lys Arg	His Glu Leu Asn Arg	Gln Val Thr Val Gln
	610	615
Arg Lys Glu Lys Asp	Phe Gln Gly Met Leu Glu	Tyr His Lys Glu Asp
	625	630
Glu Ala Leu Leu Ile	Arg Asn Leu Val	Thr Asp Leu Lys Pro Gln Met
	645	650
Leu Ser Gly Thr Val Pro	Cys Leu Pro Ala	Tyr Ile Leu Tyr Met Cys
	660	665
Ile Arg His Ala Asp	Tyr Thr Asn Asp	Asp Leu Lys Val His Ser Leu
	675	680
Leu Thr Ser Thr Ile Asn	Gly Ile Lys	Val Leu Lys His Asn
	690	695
Asp Asp Phe Glu Met	Thr Ser Phe Trp	Leu Ser Asn Thr Cys Arg Leu
	705	710
Leu His Cys Leu Lys	Gln Tyr Ser Gly Asp	Glu Gly Phe Met Thr Gln
	725	730
Asn Thr Ala Lys	Gln Asn Glu His	Cys Leu Lys Asn Phe Asp Leu Thr
	740	745
Glu Tyr Arg Gln Val	Leu Ser Asp	Leu Ser Ile Gln Ile Tyr Gln Gln
	755	760
Leu Ile Lys Ile Ala	Glu Gly Val Leu Gln	Pro Met Ile Val Ser Ala
	770	775
Met Leu Glu Asn Glu	Ser Ile Gln Gly	Leu Ser Gly Val Lys Pro Thr
	785	790
Gly Tyr Arg Lys Arg	Ser Ser Ser Met	Ala Asp Gly Asp Asn Ser Tyr

805	810	815
Cys Leu Glu Ala Ile Ile Arg Gln Met Asn Ala Phe His Thr Val Met		
820	825	830
Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln		
835	840	845
Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg		
850	855	860
Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile		
865	870	880
Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly		
885	890	895
Ala Val Gln Thr Met Glu Pro Leu Ile Gln Ala Ala Gln Leu Leu Gln		
900	905	910
Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu Ala Ile Cys Ser Leu Cys		
915	920	925
Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr		
930	935	940
Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr		
945	950	960
Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp Pro Gln Gln Leu Leu Leu		
965	970	975
Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser		
980	985	990
Leu Thr Met Asp Ser Ile His Ile Pro Ala Cys Leu Asn Leu Glu Phe		
995	1000	1005
Leu Asn Glu Val		
1010		

<210> 3285
<211> 1518
<212> DNA
<213> Homo sapiens

<400> 3285
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300
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<210> 3286
 <211> 142
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Cys Glu Leu Arg Leu Gln Lys Arg Thr His Thr Val Ala Asp Lys Thr
 50 55 60
 Gln Ala Arg Arg Met Phe Glu Ser Gln Ser Ala Leu Ser Leu Val Pro
 65 70 75 80
 Val Thr Ser Tyr Val Gln Leu Pro Gly Pro Ile Pro Tyr Ser Asp Cys
 85 90 95
 Arg Leu Arg Thr Glu Asp Ala Pro Leu Leu Ser Leu His Phe Asp Leu
 100 105 110
 Leu Phe Pro Leu Lys Thr Arg Arg Pro Ala Phe Pro Lys Thr Ala Trp

115	120	125
Pro Trp Leu Cys Thr Leu Phe Thr Thr Asp Gln Asn Ser Ile		
130	135	140

<210> 3287

<211> 921

<212> DNA

<213> Homo sapiens

<400> 3287

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<210> 3288

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3288

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Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys			

35	40	45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser	Leu Asn Arg Ser	
50	55	60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser	Leu Lys Gly Ser	
65	70	75
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp	Ala Gln Arg Arg	
85	90	95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln	Val Phe Thr Ala	
100	105	110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly	Glu Gly Arg Ser	
115	120	125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp	Ala Tyr Ala Gly	
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<210> 3289

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3289

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<210> 3290

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3290

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20	25	30	
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln			

35	40	45													
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Cys	Ala	Ala	Arg	Arg	Gly	Cys	Leu	Val	Ser	Gly	Arg	Trp	Ser	Thr	His
65						70			75					80	
His	Arg	Val	Glu	Ser	Lys	Ala	Ser	Pro	Leu	Ser	Pro	Ser	Leu	Pro	Trp
									85		90			95	
Thr	Ser	Pro	Leu	Pro	Ala	Thr	Leu	Ala	Gly	Leu	Cys	Glu	Trp	Glu	Gly
								100		105			110		
Arg	Pro	Ala	Leu	Ala	Gly	Ser	Ser	Pro	Val	Pro	Pro	Ala	Leu	Ile	Leu
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Gly															

<210> 3291

<211> 1075

<212> DNA

<213> Homo sapiens

<400> 3291

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<210> 3292
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3292
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35 40 45
Ala Val Arg Leu Pro Ala Pro Ser Pro Thr Ile Ala Ala Ser Val Pro
50 55 60
Pro His Trp Leu Phe Thr Trp Leu Ala Val Ser Val Ser Gln Pro Gly
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Ser Glu Ser Xaa Arg Arg Pro Leu Pro Pro Pro Gln Leu Pro Pro Pro
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Thr Pro Pro Ser Leu Pro
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<210> 3293
<211> 2362
<212> DNA
<213> Homo sapiens

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<210> 3294
<211> 353
<212> PRT
<213> Homo sapiens

<400> 3294
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Thr Ser Leu Pro Pro Gly Pro Pro Ala Gly Arg Arg His Leu Pro Leu
35 40 45
Ser Arg Arg Arg Glu Met Ser Ser Asn Lys Glu Gln Arg Ser Ala
50 55 60
Val Phe Val Ile Leu Phe Ala Leu Ile Thr Ile Leu Ile Leu Tyr Ser
65 70 75 80
Ser Asn Ser Ala Asn Glu Val Phe His Tyr Gly Ser Leu Arg Gly Arg
85 90 95
Ser Arg Arg Pro Val Asn Leu Lys Lys Trp Ser Ile Thr Asp Gly Tyr
100 105 110
Val Pro Ile Leu Gly Asn Lys Thr Leu Pro Ser Arg Cys His Gln Cys
115 120 125
Val Ile Val Ser Ser Ser His Leu Leu Gly Thr Lys Leu Gly Pro
130 135 140
Glu Ile Glu Arg Ala Glu Cys Thr Ile Arg Met Asn Asp Ala Pro Thr
145 150 155 160
Thr Gly Tyr Ser Ala Asp Val Gly Asn Lys Thr Thr Tyr Arg Val Val
165 170 175
Ala His Ser Ser Val Phe Arg Val Leu Arg Arg Pro Gln Glu Phe Val
180 185 190
Asn Arg Thr Pro Glu Thr Val Phe Ile Phe Trp Gly Pro Pro Ser Lys
195 200 205
Met Gln Lys Pro Gln Gly Ser Leu Val Arg Val Ile Gln Arg Ala Gly
210 215 220
Leu Val Phe Pro Asn Met Glu Ala Tyr Ala Val Ser Pro Gly Arg Met
225 230 235 240
Arg Gln Phe Asp Asp Leu Phe Arg Gly Glu Thr Gly Lys Asp Arg Glu
245 250 255
Lys Ser His Ser Trp Leu Ser Thr Gly Trp Phe Thr Met Val Ile Ala
260 265 270
Val Glu Leu Cys Asp His Val His Val Tyr Gly Met Val Pro Pro Asn
275 280 285
Tyr Cys Ser Gln Arg Pro Arg Leu Gln Arg Met Pro Tyr His Tyr Tyr
290 295 300
Glu Pro Lys Gly Pro Asp Glu Cys Val Thr Tyr Ile Gln Asn Glu His
305 310 315 320
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<210> 3295

<211> 690

<212> DNA

<213> Homo sapiens

<400> 3295

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<210> 3296

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3296

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Ser	Asp	Lys	Asp	Ala	Leu	Glu	Asp	His	Met	Asp	Gly	His	Phe	Phe	Phe
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115

120

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<211> 3176
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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Thr	Ala	Tyr
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Gln	Gln	Phe
Phe	Thr	Glu
Met	Asn	Leu
Leu	Ser	Asp
Arg	Tyr	Arg
Phe		

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Asp	Val	Ala
Arg	Thr	Ala
Thr	Asp	His
Ile	Ser	Arg
Asp	Ala	Phe

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Arg	Ile	Ser	Ile
Pro	Asn	Lys	Tyr
Ile	Ser	Tyr	Met
Tyr	Phe	Met	Lys
Phe		Asn	Arg

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Ser	Lys	Gly
Ile	Asn	Leu
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Leu	Pro	Asn
Asn	Gly	Phe
Phe		Thr

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Glu	Asn	Ser
Ser	Thr	Phe
Phe	Phe	Asp
Lys	Lys	Lys
Lys	Gln	Gln
Phe		

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Leu	Gln	Phe
Phe	Pro	Gln
Gln	Ser	Gln
Ala	Glu	Tyr
Tyr	Ile	

130	135	140
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Arg	Val	Pro
Pro	Asp	Asp
Asp	Lys	Thr
Thr	Ile	Asn
Ile	Glu	Ile
Ile	Leu	Lys
Lys		Pro

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Glu	Asp	Pro	Asp
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Gln	Leu	Lys	

165	170	175
Ala	Tyr	Ile
Ile	Arg	Ser
Ser	Gln	Thr
Gly	Val	Gln
Ile	Ile	Leu
Leu	Met	Lys
Met	Ile	Glu

180	185	190
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Gln	Gln	Asn
Asn	Leu	Val
Val	Arg	Tyr
Tyr	Tyr	Glu
Glu	Leu	Asp
Asp	Pro	Tyr

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210 > 3301
 211 > 2109
 212 > DNA
 213 > Homo sapiens

400 > 3301
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<212> PRT
<213> Homo sapiens

<400> 3302

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Gln	Leu	Gln	Gly	Gly	Arg	Phe	Leu	Met	Gly	Thr	Asn	Ser	Pro	Asp	Ser
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Arg	Asp	Gly	Glu	Gly	Pro	Val	Arg	Glu	Ala	Thr	Val	Lys	Pro	Phe	Ala
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Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	Asp	Phe	Val	Arg
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Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	Gly	Trp	Ser	Phe	Val
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Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	Asn	Lys	Ala	Thr	Gln	Pro
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Tyr	Gly	Leu	Tyr	Asp	Leu	Leu	Gly	Asn	Val	Trp	Glu	Trp	Thr	Ala	Ser
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His	Val	Ala	Asn	Ser	Ala	Ile	Pro	Ser	Ser	Arg	Ala	Ser	Ala	Ser	Gly
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Lys	Asn	Phe	Pro	Phe	Pro	Val	Ser	His	Pro	Ser	Val	Ala	Gly	Ala	Ser
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His	Gln	Gly	Arg	Arg	Gly	Leu	Ser	Leu	Leu	Cys	Phe	Gly	Glu	Gly	Ala
						290			295			300			
Gln	Cys	Val	Leu	Thr	Met	Ala	Gly	Gly	Gln	Val	Phe	Leu	Leu	Glu	Ala
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<212> DNA
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<400> 3303

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 65 70 75 80
 Val Ala Glu Ala Ala Asp Leu Asp Gly Glu Ile Asp Leu Ser Ala
 85 90 95
 Cys Tyr Asp Val Thr Glu Tyr Pro Val Gln Arg Asn Tyr Gly Phe Gln
 100 105 110
 Ile His Thr Lys Glu Gly Glu Phe Thr Leu Ser Ala Met Thr Ser Gly
 115 120 125
 Ile Arg Arg Asn Trp Ile Gln Thr Ile Met Lys His Val His Pro Thr
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 Thr Ala Pro Asp Val Thr Ser Ser Leu Pro Glu Glu Lys Asn Lys Ser
 145 150 155 160
 Ser Cys Ser Phe Glu Thr Cys Pro Arg Ser Thr Glu Lys Gln Glu Ala
 165 170 175
 Glu Leu Gly Glu Pro Asp Pro Glu Gln Lys Arg Ser Arg Ala Arg Glu

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<212> DNA
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<400> 3306

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Gly	Leu	Asp	Leu	Ile	Ser	Val	Glu	Trp	Arg	Leu	Gln	His	Lys	Gly	Arg
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Gly	Gln	Leu	Val	Tyr	Ser	Trp	Thr	Ala	Gly	Gln	Gly	Gln	Ala	Val	Arg
									115	120					125
Lys	Gly	Ala	Thr	Leu	Xaa	Ala	Cys	Thr	Thr	Gly	His	Gly	Xaa	Arg	Asp
									130	135					140
Ala	Ser	Leu	Thr	Leu	Pro	Gly	Leu	Thr	Ile	Gln	Asp	Glu	Gly	Thr	Tyr
									145	150					160
Ile	Cys	Gln	Ile	Thr	Thr	Ser	Leu	Tyr	Arg	Ala	Gln	Gln	Ile	Ile	Gln
									165	170					175
Leu	Asn	Ile	Gln	Ala	Ser	Pro	Lys	Val	Arg	Leu	Ser	Leu	Ala	Asn	Glu
									180	185					190
Ala	Leu	Leu	Pro	Thr	Leu	Ile	Cys	Asp	Ile	Ala	Gly	Tyr	Tyr	Pro	Leu
									195	200					205
Asp	Val	Val	Val	Thr	Trp	Thr	Arg	Glu	Glu	Leu	Gly	Gly	Ser	Pro	Ala
									210	215					220
Gln	Val	Ser	Gly	Ala	Ser	Phe	Ser	Ser	Leu	Arg	Gln	Ser	Val	Ala	Gly
									225	230					240
Thr	Tyr	Ser	Ile	Ser	Ser	Ser	Leu	Thr	Ala	Glu	Pro	Gly	Leu	Cys	Arg
									245	250					255
Cys	His	Leu	His	Leu	Pro	Gly	His	Thr	His	Leu	Ser	Gly	Gly	Ala	Pro
									260	265					270
Trp	Gly	Gln	His	Pro	Gly	Cys	Pro	Thr	Arg	Ala	Glu	Asn	Ser	Leu	Gly
									275	280					285
Ser	His	Leu	Cys	Gln	Gln	Ser	Leu	Pro	Ser	Cys	Thr	Asp	Val	Pro	Gly
									290	295					300
Ala	Ser	Glu	Thr	Ala	Ser	Thr	Tyr	Arg	Thr	Trp	Ala	Ala	Ser	Gly	
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<210> 3307
<211> 352
<212> DNA
<213> Homo sapiens

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 180
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 240
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 352

<210> 3308
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3308
 Met Gly Leu Pro Arg Ala Leu Ala Leu Pro Ser Gly Gly Arg Ser Gly
 1 5 10 15
 Ser Leu His Pro Asp Pro Gly Ala Ser Leu Pro Cys Pro Val Leu Ile
 20 25 30
 Pro Arg Trp Glu Pro Cys Leu Gly Gln Gly Gly Arg Val Asp Gly Ser
 35 40 45
 Trp Asp Cys Asp Ile Gly Arg Arg Gly Arg Ser Pro Ala Leu Ser Ser
 50 55 60
 Ala Gly Trp Ala Gly Ile His Leu Ala Ala Ser Gln Gly Leu Cys Pro
 65 70 75 80
 Ala Gly Trp Ser Leu Cys Cys Pro Asn Gln Val Ser Thr Phe Pro Ala
 85 90 95
 Pro Met Arg Arg Glu Gly Gly Arg Trp Trp Leu Gly Trp Arg
 100 105 110

<210> 3309
 <211> 737
 <212> DNA
 <213> Homo sapiens

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 120
 ccccaggacc ccaagtacca gggctgcgg gcacgtggcc gggagatccg gaaggagctt
 180
 gttcacctgt accccaggga ggcccagctt gaggagcagt tctacctgca ggcgctgaag
 240
 ctgccccacc acccccaccc agacgtccc gtcggggatg agagccaggc tcgagtgctc
 300
 cacatggtcg gagacaagcc agttttctcc ttccaacctc ggggccacct ggaaattggc
 360
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 420
 tacctgcgcg gggctggagc cctcctgcag cacggcctgg tcaacttcac attcaacaag
 480

cttctccgccc ggggcttcac ccccatgacg gtgccagacc ttctccgcgg agcagtgtt
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 720
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 737

<210> 3310
 <211> 210
 <212> PRT
 <213> Homo sapiens

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 20 25 30
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 35 40 45
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val
 50 55 60
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly
 65 70 75 80
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu
 85 90 95
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala
 100 105 110
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg
 115 120 125
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val
 130 135 140
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr
 145 150 155 160
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala
 165 170 175
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg
 180 185 190
 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu
 195 200 205
 Thr Asn
 210

<210> 3311
 <211> 486
 <212> DNA
 <213> Homo sapiens

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 120
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 240
 taccagcgct atggagtccg gtcctacctg caccagttt atgaggactg tacagcctca
 300
 atttgggagt atgaggatga tttccagatc caaagatcac ctaacaggtg gagctcagta
 360
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 486

<210> 3312
<211> 102
<212> PRT
<213> Homo sapiens

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 Phe Tyr Glu Asp Cys Thr Ala Ser Ile Trp Glu Tyr Glu Asp Asp Phe
 35 40 45
 Gln Ile Gln Arg Ser Pro Asn Arg Trp Ser Ser Val Phe Trp Lys Val
 50 55 60
 Gly Leu Ile Ser Gly Thr Val Phe Val Ile Leu Gly Leu Thr Val Leu
 65 70 75 80
 Ala Val Gly Phe Leu Val Pro Pro Lys Ile Glu Ala Phe Gly Glu Ala
 85 90 95
 Asp Phe Val Val Val Asp
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<210> 3313
<211> 1791
<212> DNA
<213> Homo sapiens

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420
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720
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960
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1791

<210> 3314
<211> 537
<212> PRT

<213> Homo sapiens

<400> 3314

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 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly
 35 40 45
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
 50 55 60
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
 65 70 75 80
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
 85 90 95
 Ile Cys Tyr Val Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
 100 105 110
 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
 115 120 125
 Glu Pro Val Tyr Ile Ala Gly Gln Ala Phe Phe Asn Tyr Ser Thr
 130 135 140
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
 145 150 155 160
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
 165 170 175
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
 180 185 190
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
 195 200 205
 Ser Val Leu Cys Ala Gln Lys Ala Ala Leu Asn Gly Ala Asp
 210 215 220
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
 225 230 235 240
 Arg Leu Asn Val Ile Arg Asn Asp Asn Ser Trp Asp Tyr Thr Lys
 245 250 255
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
 260 265 270
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
 275 280 285
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
 290 295 300
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
 305 310 315 320
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
 325 330 335
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
 340 345 350
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
 355 360 365
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
 370 375 380
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
 385 390 395 400
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

405	410	415
Asp Gly Thr Ser Ser Tyr Lys Asp Phe Ala Met Ser Lys Asn Asn Arg		
420	425	430
Phe Thr Ser Ala Gly Gln Ala Ser Lys Asn Ile Ile Gln Pro Pro Ser		
435	440	445
Cys Val Leu His Tyr Tyr Asn Val Pro Leu Cys Val Thr Glu Glu Thr		
450	455	460
Phe Thr Lys Leu Cys Asn Asp His Glu Val Leu Thr Phe Ile Lys Tyr		
465	470	480
Lys Val Phe Asp Ala Lys Pro Ser Ala Lys Thr Leu Ser Gly Leu Leu		
485	490	495
Glu Trp Glu Cys Lys Thr Asp Ala Val Glu Ala Leu Thr Ala Leu Asn		
500	505	510
His Tyr Gln Ile Arg Val Pro Asn Gly Ser Asn Pro Tyr Thr Leu Lys		
515	520	525
Leu Cys Phe Ser Thr Ser Ser His Leu		
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<210> 3315

<211> 934

<212> DNA

<213> Homo sapiens

<400> 3315

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120
gaaggtaaa ttacacagagc acttcataatc taccaggta atatcaaaat atatgttcct
180
aaaacatccc tgagttcacc accttggcca gaagttgttc tgccagaccc agttgaggag
240
accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgtcac gggcagtat
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900

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<210> 3316
<211> 187
<212> PRT
<213> Homo sapiens

<400> 3316
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Ser Ile His Arg Ala Leu His Ile Tyr Gln Gly Asn Ile Lys Ile Tyr
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Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu
35 40 45
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys
50 55 60
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val
65 70 75 80
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile
85 90 95
Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu
100 105 110
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys
115 120 125
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu
130 135 140
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys
145 150 155 160
Asn Phe Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg
165 170 175
Ile Asn Ser Ile Glu Ile Ala Pro Cys Leu Leu
180 185

<210> 3317
<211> 1665
<212> DNA
<213> Homo sapiens

<400> 3317
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aaaagaagct gagaaaaaaaa gatgccaaaga ctggaagcat cgaagatggt gagcccttcc
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caagtgtac gtttatgaagc tgccaaatta agaacactga gcaaatgtaa ttctccccgt
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300
aagtttttag aaacctactg tgtggaggaa gagaagacca gtgccaaccc tgagactctg
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420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa
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<210> 3318
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 3318
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 Glu Lys Arg Glu Glu Arg Arg Glu Leu Glu Lys Lys Arg Leu

35	40	45
Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys		
50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		80
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		160
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
225	230	235
Lys Asn Val Ser Gly Cys Leu Lys Val Gln Ala Ala Cys		240
245	250	

<210> 3319
<211> 1541
<212> DNA
<213> Homo sapiens

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 Tyr Glu Ile Lys Met Ala Phe Val Leu Trp Leu Leu Ser Pro Tyr Thr
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<400> 3321

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<212> DNA

<213> Homo sapiens

<400> 3323

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 Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln Ala Glu Leu Lys
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<212> DNA

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<400> 3327

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 <211> 521
 <212> PRT
 <213> Homo sapiens

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 His Val Gln Leu Glu Val Met Val Lys His Pro Pro Ala Glu Pro Ser
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 Arg Phe Ile Ser Ala Pro Thr Lys Thr Pro Asp Lys Met Gly Phe Asp
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Thr Lys Gly Glu Leu Gly Cys Phe Leu Ser His Tyr Asn Ile Trp Lys			
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Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp			
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Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile			
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420	425	430	
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<211> 705

<212> DNA

<213> Homo sapiens

<400> 3329

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<210> 3330
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 35 40 45
 Pro Val Pro Thr Leu Ala Phe Thr His Val Ala Arg Ala Gln Ala Gly
 50 55 60
 Met Tyr His Cys Leu Ala Glu Leu Pro Thr Gly Ala Ala Ala Ser Ala
 65 70 75 80
 Pro Val Met Leu Arg Val Leu Tyr Pro Pro Lys Thr Pro Thr Met Met
 85 90 95
 Val Phe Val Glu Pro Glu Gly Gly Leu Arg Gly Ile Leu Asp Cys Arg
 100 105 110
 Val Asp Ser Glu Pro Leu Ala Ser Leu Thr Leu His Leu Gly Ser Arg
 115 120 125
 Leu Val Ala Ser Ser Gln Pro Gln Gly Ala Pro Ala Glu Pro His Ile
 130 135 140
 His Val Leu Ala Ser Pro Asn Ala Leu Arg Val Asp Ile Glu Ala Leu
 145 150 155 160
 Arg Pro Ser Asp Gln Gly Glu Tyr Ile Cys Ser Ala Ser Asn Val Leu
 165 170 175
 Gly Ser Ala Ser Thr Ser Thr Tyr Phe Gly Val Arg Ala Leu His Arg
 180 185 190
 Leu His Gln Phe Gln Gln Leu Leu Trp Val Leu Gly Leu Leu Val Gly
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 <212> DNA
 <213> Homo sapiens

<400> 3331

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35 40 45
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50 55 60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65 70 75 80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
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<210> 3333
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<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 His Met His His Val Arg Asp Arg Glu Met Pro Glu Ala Leu Glu Phe
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 Asn Leu Ser Ala Asn Pro Glu Ser Ser Thr Ile Phe Gln Arg Asn Ser
 65 70 75 80
 Gln Thr Glu Ala Leu Glu Phe Asn Pro Ser Ala Asn Pro Glu Ala Ser
 85 90 95
 Thr Ile Phe Gln Arg Asn Ser Gln Thr Asp Val Val Glu Ile Arg Arg
 100 105 110
 Ser Asn Cys Thr Asn His Val Ser Ala Val Arg Phe Ser Gln Gln Tyr
 115 120 125
 Ser Leu Cys Ser Thr Ile Phe Leu Asp Asp Ser Thr Ala Ile Gln His
 130 135 140
 Tyr Leu Thr Met Thr Ile Ile Ser Val Thr Leu Glu Ile Pro His His
 145 150 155 160
 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln
 165 170 175
 Leu His Ser Phe Ala Val Ser Thr Val His Ile Met Lys Lys Arg Asn
 180 185 190
 Gly Gly Gly Ser Leu Asn Asn Tyr Ser Ser Ser Ile Pro Ser Thr Pro
 195 200 205
 Ser Thr Ser Gln Glu Asp Pro Gln Phe Ser Val Pro Pro Thr Ala Asn
 210 215 220
 Thr Pro Thr Pro Val Cys Lys Arg Ser Met Arg Trp Ser Asn Leu Phe
 225 230 235 240
 Thr Ser Glu Lys Gly Ser His Pro Asp Lys Glu Arg Lys Ala Pro Glu
 245 250 255
 Asn His Ala Asp Thr Ile Gly Ser Gly Arg Ala Ile Pro Ile Lys Gln
 260 265 270
 Gly Met Leu Leu Lys Arg Ser Gly Lys Trp Leu Lys Thr Trp Lys Lys
 275 280 285
 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser
 290 295 300
 Leu Gly Asp Tyr Met Lys Asn Ile His Lys Lys Glu Ile Asp Leu Gln
 305 310 315 320
 Thr Ser Thr Ile Lys Val Pro Gly Lys Trp Pro Ser Leu Ala Thr Ser

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355	360	365
Ser Thr Thr Ser Pro Lys Leu Asn Pro Pro Pro Ser Pro His Ala Asn		
370	375	380
Lys Lys Lys His Leu Lys Lys Ser Thr Asn Asn Phe Met Ile Val		
385	390	400
Ser Ala Thr Gly Gln Thr Trp His Phe Glu Ala Thr Thr Tyr Glu Glu		
405	410	415
Arg Asp Ala Trp Val Gln Ala Ile Gln Ser Gln Ile Leu Ala Ser Leu		
420	425	430
Gln Ser Cys Glu Ser Ser Lys Ser Lys Ser Gln Leu Thr Ser Gln Ser		
435	440	445
Glu Ala Met Ala Leu Gln Ser Ile Gln Asn Met Arg Gly Asn Ala His		
450	455	460
Cys Val Asp Cys Glu Thr Gln Asn Pro Lys Trp Ala Ser Leu Asn Leu		
465	470	475
Gly Val Leu Met Cys Ile Glu Cys Ser Gly Ile His Arg Ser Leu Gly		
485	490	495
Thr Arg Leu Ser Arg Val Arg Ser Leu Glu Leu Asp Asp Trp Pro Val		
500	505	510
Glu Leu Arg Lys Val Met Ser Ser Ile Gly Asn Glu Leu Ala Asn Ser		
515	520	525
Ile Trp Glu Glu Ser Ser Gln Gly Arg Thr Lys Pro Ser Val Asp Ser		
530	535	540
Thr Arg Glu Glu Lys Glu Arg Trp Ile Arg Ser Lys Tyr Glu Glu Lys		
545	550	555
Leu Phe Leu Ala Pro Leu Pro Cys Thr Glu Leu Ser Leu Gly Gln Gln		
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Leu Leu Arg Ala Thr Ala Asp Glu Asp Leu Gln Thr Ala Ile Leu Leu		
580	585	590
Leu Ala His Gly Ser Arg Glu Glu Val Asn Glu Thr Cys Gly Glu Gly		
595	600	605
Asp Gly Cys Thr Ala Leu His Leu Ala Cys Arg Lys Gly Asn Val Val		
610	615	620
Leu Ala Gln Leu Leu Ile Trp Tyr Gly Val Asp Val Met Ala Arg Asp		
625	630	635
Ala His Gly Asn Thr Ala Leu Thr Tyr Ala Arg Gln Ala Ser Ser Gln		
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<211> 477

<212> DNA

<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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His Trp Asn Ala Leu Ala Val Ile Pro Ala Arg
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<211> 679
<212> DNA
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<210> 3338
<211> 102
<212> PRT
<213> Homo sapiens

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Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
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<210> 3339
<211> 1341
<212> DNA
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 <213> Homo sapiens

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 35 40 45
 Thr Thr Ala Arg Arg Thr Tyr Ile Tyr Ile Tyr Ile Lys Asn Ile Ser
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<210> 3341
 <211> 1132
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ctggagcatg accacagacc cattcaggga ggctggcgga ctcttcatcc tggacagtcc
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 240
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<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
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Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
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Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
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Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
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Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

	100	105	110												
Phe	Gln	Asp	Arg	Thr	Cys	Glu	Ile	Val	Glu	Asp	Thr	Glu	Ser	Ser	Arg
	115			120							125				
Met	Val	Lys	Lys	Met	Lys	Lys	Arg	Ile	Cys	Leu	Val	Leu	Asp	Cys	Leu
	130			135							140				
Cys	Ala	His	Asp	Phe	Ser	Asp	Lys	Thr	Ala	Asp	Leu	Ile	Asn	Leu	Gln
	145			150							155				160
His	Tyr	Val	Ile	Lys	Glu	Lys	Arg	Leu	Ser	Glu	Arg	Glu	Thr	Val	Val
	165							170				175			
Ile	Phe	Tyr	Asp	Val	Val	Arg	Val	Val	Glu	Ala	Leu	His	Gln	Lys	Asn
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Ile	Val	His	Arg	Asp	Leu	Lys	Leu	Gly	Asn	Met	Val	Leu	Asn	Lys	Arg
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Thr	His	Arg	Ile	Thr	Ile	Thr	Asn	Phe	Cys	Leu	Gly	Lys	His	Leu	Val
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Ser	Glu	Gly	Asp	Leu	Leu	Lys	Asp	Gln	Arg	Gly	Ser	Pro	Ala	Tyr	Ile
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Ser	Pro	Asp	Val	Leu	Ser	Gly	Arg	Pro	Tyr	Arg	Gly	Lys	Pro	Ser	Asp
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Met	Trp	Ala	Leu	Gly	Val	Val	Leu	Phe	Thr	Met	Leu	Tyr	Gly	Gln	Phe
								260		265		270			
Pro	Phe	Tyr	Asp	Ser	Ile	Pro	Gln	Glu	Leu	Phe	Arg	Lys	Ile	Lys	Ala
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Ala	Glu	Tyr	Thr	Ile	Pro	Glu	Asp	Gly	Arg	Val	Ser	Glu	Asn	Thr	Val
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Cys	Leu	Ile	Arg												
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<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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594

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<210> 3344
<211> 143
<212> PRT
<213> Homo sapiens

<400> 3344
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Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
35 40 45
Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
50 55 60
Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
65 70 75 80
Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
85 90 95
Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
100 105 110
Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
115 120 125
Trp Val Arg Lys Pro Pro Glu Gln Gln Phe Leu Leu Thr Leu
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<210> 3345
<211> 1149
<212> DNA
<213> Homo sapiens

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 1149

<210> 3346
 <211> 263
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Gly Glu Pro Glu Phe Arg Cys Pro Glu Arg Val Met Asp Leu Gly
 50 55 60
 Leu Ser Glu Asp His Phe Ser Arg Pro Val Gly Leu Phe Leu Ala Ser
 65 70 75 80
 Asp Val Gln Gln Leu Arg Gln Ala Ile Glu Glu Cys Lys Gln Val Ile
 85 90 95
 Leu Glu Leu Pro Glu Gln Ser Glu Lys Gln Lys Asp Ala Val Val Arg
 100 105 110
 Leu Ile His Leu Arg Leu Lys Leu Gln Glu Leu Lys Asp Pro Asn Glu
 115 120 125
 Asp Glu Pro Asn Ile Arg Val Leu Leu Glu His Arg Phe Tyr Lys Glu
 130 135 140
 Lys Ser Lys Ser Val Lys Gln Thr Cys Asp Lys Cys Asn Thr Ile Ile
 145 150 155 160
 Trp Gly Leu Ile Gln Thr Trp Tyr Thr Cys Thr Gly Cys Tyr Tyr Arg
 165 170 175
 Cys His Ser Lys Cys Leu Asn Leu Ile Ser Lys Pro Cys Val Ser Ser
 180 185 190
 Lys Val Ser His Gln Ala Glu Tyr Glu Leu Asn Ile Cys Pro Glu Thr
 195 200 205
 Gly Leu Asp Ser Gln Asp Tyr Arg Cys Ala Glu Cys Arg Ala Pro Ile
 210 215 220
 Ser Leu Arg Gly Val Pro Ser Glu Ala Arg Gln Cys Asp Tyr Thr Gly

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<210> 3347

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 3347

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 <210> 3348
 <211> 288
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Gln Val Ala Trp Tyr Asn Glu Leu Leu Pro Pro Ala Phe His Leu Pro
 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala
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<210> 3349
 <211> 1132
 <212> DNA
 <213> Homo sapiens

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 780
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 960
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 1020
 ccagtagttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa
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 1132

<210> 3350
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 3350
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 Gln Gly Leu Ala Val Tyr Ala Ser Pro Glu Asn Lys Lys Leu Phe Glu
 35 40 45
 Glu Glu Lys Leu Leu Arg Gln Glu Gly Lys Leu Glu Lys Ile Gln Thr
 50 55 60
 Lys Ala Gly Glu Ala Thr Val Lys Phe Leu Lys Ser Cys Arg Leu Glu
 65 70 75 80
 Val Gly Met Lys Asn Asn Val Lys Trp Glu Leu Asn Pro Glu Ile Val
 85 90 95
 Ala Arg His Phe Phe Lys Asn Leu Gly Val Val Ala Pro His Thr
 100 105 110
 Leu Lys Leu Pro Ala Glu Pro Ile Thr Arg Trp Gly Glu Tyr Trp Cys
 115 120 125
 Glu Val Thr Val Asn Gly Leu Asp Thr Val Arg Val Pro Met Ser Val
 130 135 140
 Val Asn Phe Glu Lys Pro Lys Thr Lys Arg Tyr Lys Tyr Trp Leu Ala
 145 150 155 160
 Gln Gln Ala Ala Lys Ala Met Ala Pro Thr Ser Pro Gln Ile
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<210> 3351
 <211> 1422
 <212> DNA
 <213> Homo sapiens

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 cacctggatt tttgaggacc caaggttgat tctcatcaact ttttaataa ctccgattgc
 840
 ggcacatctg ccaataggat tcttagagct caccccgctc gttggattga tccgctggtg
 900
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 960
 cagcaacaag gtcacaaaagg acccgccgt gggatggac agagactccc acctcttgta
 1020
 ctcaaaaactc cacctcagcg tcctgcaagt gctcatgacg ctgcagctgc acctgaccga
 1080
 gaagaatctg tatgggcgcc tggggctgat cctttcgac cacatggtcc cgctggtaga
 1140
 ggagatcaac aggttggcggt atgaactgaa cccctcaac gcctcccagg agattgagct
 1200
 ctgcgtggac cggctggcgc aggctctgca ggtggccatg gcctcaggag ctctgctgtg
 1260
 cacgagagat gaccttagaa cttgttctc caggcccc cgtaataacc tcctccagct
 1320
 ggtgatctcg ggtccccgtgc agcagtcgccc tcacgcccgcg ctccccccgg gtttctaccc
 1380
 ccacatccac acgccccccgc tgggctacgg ggctgtcccc cc
 1422

<210> 3352
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 3352
 Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile
 1 5 10 15
 Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

	20	25	30												
Pro	Arg	Cys	Ala	Glu	Arg	Arg	Gln	Gly	Gly	Val	Val	Pro	Pro	Gly	His
	35			40								45			
Leu	Leu	Gln	Gln	Pro	Ala	Ala	Glu	Arg	Ala	Ala	Ala	His	Arg	Gly	Gln
	50				55						60				
Gly	Pro	Arg	Gly	Ala	Ala	Gly	Gly	Val	Arg	Val	Pro	Gly	Ala	Gln	Gly
	65				70				75			80			
Ala	Gln	Arg	Ala	Ala	Gln	Glu	Thr	Glu	Phe	Pro	Ser	Gly	Ala	Ser	Thr
	85					90						95			
Ser															

<210> 3353

<211> 420

<212> DNA

<213> Homo sapiens

<400> 3353

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nngaagctat cctcatcctc ttcccgacct cggtcctgtg aagtccctgg aattaacatc
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tttccatctc ctgaccagcc tgccaatgtg cctgtcctcc cacctgccat gaacacgggg
120
ggctccctac ctgacacctac caacctgcac tttcccccac cactgcccac cccctggac
180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctccaa tttgaccac
240
accatgactc acctgggcat cagcagggc atgggcctgg gcccaggcta ttagtcacca
300
gggcgtcccc ctggatacca gtaaaactgtc cactgaccag cggttacccc cataaccata
360
cagttcccca agtttgtnt ctgcttaccc agccccacac cccaaagtt taacagcagc
420
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<210> 3354

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3354

Xaa	Lys	Leu	Ser	Ser	Ser	Ser	Ser	Arg	Pro	Arg	Ser	Cys	Glu	Val	Pro
	1				5			10			15				
Gly	Ile	Asn	Ile	Phe	Pro	Ser	Pro	Asp	Gln	Pro	Ala	Asn	Val	Pro	Val
				20				25			30				
Leu	Pro	Pro	Ala	Met	Asn	Thr	Gly	Gly	Ser	Leu	Pro	Asp	Leu	Thr	Asn
				35			40			45					
Leu	His	Phe	Pro	Pro	Leu	Pro	Thr	Pro	Leu	Asp	Pro	Glu	Glu	Thr	
					50		55			60					
Ala	Tyr	Pro	Ser	Leu	Ser	Gly	Gly	Asn	Ser	Thr	Ser	Asn	Leu	Thr	His
					65		70			75			80		
Thr	Met	Thr	His	Leu	Gly	Ile	Ser	Arg	Gly	Met	Gly	Leu	Gly	Pro	Gly
				85			90			95					
Tyr	Asp	Ala	Pro	Gly	Arg	Pro	Pro	Gly	Tyr	Gln					
							100			105					

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<210> 3355
<211> 474
<212> DNA
<213> Homo sapiens

<400> 3355
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gtaagattat ctccagccaa aatgtcaacc aagaattcta cagatctagt tgaatatgtt
120
gacaagagtc atgctttct ccccatcatt ccaaacacccc agagaggtca gctagaagac
180
agactgaaca accaggcgcg taccatagct ttcccttctt aacaaggcctt ccgcacatcaag
240
gaggacatct ctgcttgccct gcaggggacc catggcttcc gaaaagagga atcgctcgcc
300
aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
360
aatattgaga ttttagaaga ccaaataaga gctcgagatc aggccggccac aggaactaac
420
tttgcagtac acgagataaa catcaaacac ctacaaggag ttgggagatc ttcc
474

<210> 3356
<211> 131
<212> PRT
<213> Homo sapiens

<400> 3356
Met Ser Thr Lys Asn Ser Thr Asp Leu Val Glu Tyr Val Asp Lys Ser
1 5 10 15
His Ala Phe Leu Pro Ile Ile Pro Asn Thr Gln Arg Gly Gln Leu Glu
20 25 30
Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
35 40 45
Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
50 55 60
Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
65 70 75 80
Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
85 90 95
Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
100 105 110
Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
115 120 125
Arg Ser Phe
130

<210> 3357
<211> 2268
<212> DNA
<213> Homo sapiens

<400> 3357

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nnggagcccc tggctcgatt ggtcctcacc atgataaccc tccacaacag gtactccagc
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agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg
120
agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgtttctga
180
aagaaaaccg catcctggat ggatagcctg tgcaagcagag gtcttggcca cttgaatgtat
240
tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg
300
cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggcctctgcg
360
gtgtcggcgc tgctggtggc ggccggagagg aaccggcgc atcgtctccc gagcctgtc
420
ctgcccccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga
480
agaaacatta ccaaggtcct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc
540
acagccaaaa aactgggtgt acagactgtg gcggttata gtgaggctga cagaaattcc
600
atgcatgtat atatggcaga tgaagcatat tccatggcc ccgctccctc ccagcagagc
660
tacctatcta tggagaaaaat cattcaagtg gccaaagacct ctgctgcaca ggctatccat
720
ccaggatgcg gtttttttc agaaaacatg gaatttgctg aactttgtaa gcaagaagga
780
attattttta taggccttcc tccatctgca attagagaca tgggtataaa gagcacatcc
840
aaatccataa tggctgctgc tggagtacct gttgtggagg gtttatcatgg tgaggaccaa
900
tcagaccagt gcctgaagga acacgcaggc agaattggct atcctgtcat gattaaagcc
960
gtccgggtg gaggaggaaa aggaatgagg attgttagat cagaacaaga atttcaagaa
1020
cagtttaggtt cagcacggag agaagctaag aagtcttca atgatgtgc tatgtgtatc
1080
gagaagttt tagacacacc gaggcatgta gaagtccagg tgtttggta tcaccatggc
1140
aatgctgtgt acttgtttga aagagactgt agtgtgcaga ggcgcacatca gaagatcatt
1200
gaggaggccc cagcgcctgg tattaaatct gaagtaagaa aaaagctggg agaagctgca
1260
gtcagagctg ctaaagctgt aaattatgtt ggagcaggga ctgtggagtt tattatggac
1320
tcaaaacata atttctgttt catggagatg aatacaaggc tgcaagtggaa acatcctgtt
1380
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1440
aagattcctt tgagccagga agaaataact ctgcaggccc atgccttcga agctagaata
1500
tatgcagaag atcctagcaa taacttcatg cctgtggcag gcccattagt gcacotctct
1560
actcctcgag cagacccttc caccaggatt gaaactggag tacggcaagg agacgaagtt
1620

tccgtgcatt atgacccat gattgcgaag ctggcgtgt gggcagcaga tcgccaggcg
 1680
 gcattgacaa aactgaggta cagcctcgt cagtacaata ttgttggact gcacaccaac
 1740
 attgacttct tactcaacct gtctggcac ccagagttt aagctggaa cgtgcacact
 1800
 gatttcatcc ctcaacacca caaacagttt ttgctcagtc ggaaggctgc agccaaagag
 1860
 tctttatgcc aggccgcct gggtctcatc ctcaaggaga aagccatgac cgacacttcc
 1920
 actcttcagg cacatgatca attctctcca tttcgtcta gcagtggaa aagactgaat
 1980
 atctcgata ccagaaacat gactctaaa gatggtaaaa acagtttcg tctcctcgaa
 2040
 taatcaacca tttccatact catgtaatct aggctactc tggagttatt acaggtttgg
 2100
 ttccagacca ctacaataaa atgtagccat agctgtAACG tataaccatg atgggtctta
 2160
 tagcatgcag attgaagata aaactttcca agtccttggt aatcttaca gcgagggaga
 2220
 ctgcacttac ctgaaatgtt ctgttaatgg agtgctagt aaagcgaa
 2268

<210> 3358
<211> 493
<212> PRT
<213> Homo sapiens

<400> 3358
 Gln Thr Val Ala Val Tyr Ser Glu Ala Asp Arg Asn Ser Met His Val
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 Asp Met Ala Asp Glu Ala Tyr Ser Ile Gly Pro Ala Pro Ser Gln Gln
 20 25 30
 Ser Tyr Leu Ser Met Glu Lys Ile Ile Gln Val Ala Lys Thr Ser Ala
 35 40 45
 Ala Gln Ala Ile His Pro Gly Cys Gly Phe Leu Ser Glu Asn Met Glu
 50 55 60
 Phe Ala Glu Leu Cys Lys Gln Glu Gly Ile Ile Phe Ile Gly Pro Pro
 65 70 75 80
 Pro Ser Ala Ile Arg Asp Met Gly Ile Lys Ser Thr Ser Lys Ser Ile
 85 90 95
 Met Ala Ala Ala Gly Val Pro Val Val Glu Gly Tyr His Gly Glu Asp
 100 105 110
 Gln Ser Asp Gln Cys Leu Lys Glu His Ala Arg Arg Ile Gly Tyr Pro
 115 120 125
 Val Met Ile Lys Ala Val Arg Gly Gly Gly Lys Gly Met Arg Ile
 130 135 140
 Val Arg Ser Glu Gln Glu Phe Gln Glu Gln Leu Glu Ser Ala Arg Arg
 145 150 155 160
 Glu Ala Lys Lys Ser Phe Asn Asp Asp Ala Met Leu Ile Glu Lys Phe
 165 170 175
 Val Asp Thr Pro Arg His Val Glu Val Gln Val Phe Gly Asp His His
 180 185 190
 Gly Asn Ala Val Tyr Leu Phe Glu Arg Asp Cys Ser Val Gln Arg Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Ser Arg Lys Ala Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

<210> 3359

<211> 652

<212> DNA

<213> Homo sapiens

<400> 3359

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gcctataacct actgttagctt ctccacgtat ggaccctaaa ggctactgct gctactacgg
120
ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180
gggaggtaat taaaaaacag tggaatggaa aaacagtgcgt gtatgcattcc tgtaatatgc
240
tccttgtaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
300

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cgcacatcttac tagtgaagta ttctgccaat gaagaaaaaca agtatgatta tcttc当地
360 actgtgaatg tgtgctcaga actggtaag ctagtttct gtgtgcttgt gtcattctgt
420 gttataaaga aagatcatca aagtagaaat ttgaaatatg ctccctggaa ggaattctct
480 gatttcatga agtggtccat tcctgcctt ctttatttcc tggataactt gattgtttc
540 tatgtccctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata
600 acaacagctc ttcttattcag gatagtgctg aagaggcgtc taaaactggat cc
652

<210> 3360
<211> 149
<212> PRT
<213> *Homo sapiens*

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<400> 3360
Met Glu Lys Gln Cys Cys Ser His Pro Val Ile Cys Ser Leu Ser Thr
      1           5                  10                  15
Met Tyr Thr Phe Leu Leu Gly Ala Ile Phe Ile Ala Leu Ser Ser Ser
      20                  25                  30
Arg Ile Leu Leu Val Lys Tyr Ser Ala Asn Glu Glu Asn Lys Tyr Asp
      35                  40                  45
Tyr Leu Pro Thr Thr Val Asn Val Cys Ser Glu Leu Val Lys Leu Val
      50                  55                  60
Phe Cys Val Leu Val Ser Phe Cys Val Ile Lys Lys Asp His Gln Ser
      65                  70                  75                  80
Arg Asn Leu Lys Tyr Ala Ser Trp Lys Glu Phe Ser Asp Phe Met Lys
      85                  90                  95
Trp Ser Ile Pro Ala Phe Leu Tyr Phe Leu Asp Asn Leu Ile Val Phe
      100                 105                 110
Tyr Val Leu Ser Tyr Leu Gln Pro Ala Met Ala Val Ile Phe Ser Asn
      115                 120                 125
Phe Ser Ile Ile Thr Thr Ala Leu Leu Phe Arg Ile Val Leu Lys Arg
      130                 135                 140
Arg Leu Asn Trp Ile
      145

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<210> 3361
<211> 1040
<212> DNA
<213> *Homo sapiens*

<400> 3361
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gacggggcqac ccggacccaa gaagtgggag gaccgcgcgt gtgcgcggcct agcggcgagg
120
ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc ccgggtctgt
180
gatgcccgag gcggggagtga agatagtcca agtcctaaga gacagcgcct ctctcattca
240

gtctttgatt atacatcagc atcaccagct ccctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagccccc ttcagttcga ccaagccaac atcacttctc agggaaacga
 360
 tgcaacacac ctgcacgcaa cagaagaagt cctcctgtca ggccgcagag aggaagaagg
 420
 gatcgcttgt ctcgacataa ttccattagt caagatgaaa actatcacca tctcccttac
 480
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt
 540
 ctgctacatc ctgctgctca tccacccag cagaatgcag tcatgggtga catacatgat
 600
 cagctccatc aaggaacagt ccctgttct tacacagtaa caacagtggc accacatggg
 660
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 720
 tctgtggttt tcagtggaca gcacccctt gctttagtgc tgcctcctcc aatgcttcag
 780
 gcatgttcag ttcagcactt accagtagca tatgctgcat tcccacccct tatttctagt
 840
 gatccatttc ttatacatcc tccacccctt tcccccatac atccctcctca tttgccacca
 900
 ccaggccagt ttgtccctt ccaaacacag caatcacgt cgcccttgca aaggatagaa
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 aatgaagtgg aactcttagg agaacatctt ccaggagccc acccccagca ccccatctg
 1020
 ttaataaata tctcaactcc
 1040

<210> 3362
 <211> 252
 <212> PRT
 <213> Homo sapiens

<400> 3362
 Met Arg Pro Trp Glu Met Thr Ser Asn Arg Gln Pro Pro Ser Val Arg
 1 5 10 15
 Pro Ser Gln His His Phe Ser Gly Glu Arg Cys Asn Thr Pro Ala Arg
 20 25 30
 Asn Arg Arg Ser Pro Pro Val Arg Arg Gln Arg Gly Arg Arg Asp Arg
 35 40 45
 Leu Ser Arg His Asn Ser Ile Ser Gln Asp Glu Asn Tyr His His Leu
 50 55 60
 Pro Tyr Ala Gln Gln Gln Ala Ile Glu Glu Pro Arg Ala Phe His Pro
 65 70 75 80
 Pro Asn Val Ser Pro Arg Leu Leu His Pro Ala Ala His Pro Pro Gln
 85 90 95
 Gln Asn Ala Val Met Val Asp Ile His Asp Gln Leu His Gln Gly Thr
 100 105 110
 Val Pro Val Ser Tyr Thr Val Thr Thr Val Ala Pro His Gly Ile Pro
 115 120 125
 Leu Cys Thr Gly Gln His Ile Pro Ala Cys Ser Thr Gln Gln Val Pro
 130 135 140
 Gly Cys Ser Val Val Phe Ser Gly Gln His Leu Pro Val Cys Ser Val

145	150	155	160
Pro	Pro	Pro	Met
Leu	Gln	Ala	Cys
Ser	Val	Gln	His
165	170	175	
Tyr	Ala	Ala	Phe
Pro	Pro	Leu	Ile
180	185	190	Ser
Pro	Pro	Asp	Pro
His	Leu	Phe	Ile
195	200	205	His
Gln	Phe	Val	Pro
210	215	220	Phe
Ile	Glu	Asn	Glu
225	230	235	Val
Pro	Gln	His	Glu
240	245	250	Leu
250			Ile
			Asn
			Ile
			Ser
			Thr

<210> 3363

<211> 718

<212> DNA

<213> Homo sapiens

<400> 3363

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120
gtagctcagg agtgtctccg gagcccactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggccgcaac aacatctaaa cagaccactt ccaatacagc
240
cggcagagct acccaaactc gtacagttt aaccgctatg atgttagag tccaaaggac
300
aggaccagac tggtggtgac tccttcccg gcccccacag cagtatcaga aacttctgac
360
aatcagtgaa tgtacaaccc agccgagggg acggtgcata actctccatc agaagccctg
420
480
gggttcctgg ccccccgtga gccgcaggag gatgcgttgc ctgcagtgca gacggccgtg
540
agctctggc aaacctaaac agagaccagt gtcccatgct ctttcttcct ggagcctgtc
600
atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta
660
ttcccccaagc agtgttagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
718
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<210> 3364

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3364

Met	Gly	His	Trp	Ser	Leu	Phe	Arg	Phe	Ala	Gln	Ser	Ser	Arg	Pro	Ser
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Ala	Leu	Gln	Ala	Thr	His	Pro	Pro	Ala	Ala	His	Gly	Gly	Pro	Gly	Thr

	20	25	30												
Pro	Gly	Leu	Leu	Met	Glu	Ser	Tyr	Ala	Pro	Ser	Pro	Arg	Leu	Gly	Cys
		35				40						45			
Thr	Phe	Thr	Asp	Cys	Gln	Lys	Phe	Leu	Ile	Leu	Leu	Trp	Gly	Pro	Gly
		50				55					60				
Lys	Glu	Ser	Pro	Thr	Val	Trp	Ser	Cys	Pro	Leu	Asp	Ser	Thr	His	His
		65			70			75				80			
Ser	Gly	Ser	Asn	Cys	Thr	Ser	Leu	Gly	Ser	Ser	Ala	Gly	Cys	Ile	Gly
		85				90					95				
Ser	Gly	Leu	Phe	Arg	Cys	Cys	Cys	Gly	Arg	Thr	Asp	Ser	Pro	Arg	Ala
		100				105					110				
Gly	Gly	Arg	Gly	Gly	Arg	Trp	Gly	Ala	Ser	Pro	Val	Gly	Ser	Gly	Asp
		115			120			125							
Thr	Pro	Glu	Leu	Leu	Gly	Arg	Gln	Cys	His	Pro	Lys	Asn	His	Gly	His
		130			135			140							
Asp	Gly	Val	Pro	Asp	His	Ala	Gly	Gln	Pro	Ile	Pro	His	His	Gln	Arg
		145			150			155			160				
Ser	Trp	Ala													

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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 120
 tcgggtggca ggcgcggcgcaaacgcagggttcacggcga cggcggcggc ggctgacggc
 180
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 240
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 300
 gcacttcgtcg cttcgtccatc ccccgaccct tcaccccgag gactggcgcc ctccctccggc
 360
 gcagctgagg gagcgggggc cggtcttcgtc ctccgttgatc gagcctccat gtccggataat
 420
 cagaacttggaa actcgtcgaaa ctcggaggag gatccagaga cggagtctgg gcccctgtg
 480
 gagcgtcgcg gggtcctcgat taagtggaca aactacattc atgggtggca ggatcggtgg
 540
 gtagtttga aaaataatgc tctgagttac tacaatctg aagatgaaac agatgtatggc
 600
 tgcagaggat ccatctgtct tagcaaggtt gtcatcacac ctcacgattt tgcgtatgt
 660
 cgatttgata ttatgtaaa tgcgtatgtt tggtatcttc gtgcgtcggaa tccagatcat
 720
 agacagcaat ggatagatgc cattgaacag cacaagactg aatctggata tggatctgaa
 780
 tccagcttgc gtcgacatgg ctcaatgggt tccctgggtgt ctggagcaag tggctactct
 840

gcaacatcca cctttcatt caagaaaggc cacagttac gtgagaagtt ggctgaaatg
900
gaaacatcta gagacatctt atgttagacaa gttgacacgc tacagaagta ctttgatgcc
960
tgtgctgatg ctgtctctaa ggatgaactt caaaggata aagtggtaga agatgatgaa
1020
gatgactttc ctacaacgca tcctgtatggt gacttcttgc atagtagccaa cggcaataaa
1080
gaaaagttat ttccacatgt gacacaaaaa ggaattaatg gtatagactt taaagggaa
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1620
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1680
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2280
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2389

<210> 3366

<211> 624
<212> PRT
<213> Homo sapiens

<400> 3366
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Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
35 40 45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
50 55 60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65 70 75 80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
85 90 95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
100 105 110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
115 120 125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
130 135 140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145 150 155 160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
165 170 175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
180 185 190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
195 200 205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
210 215 220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225 230 235 240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
245 250 255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
260 265 270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
275 280 285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Ser His Phe
290 295 300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305 310 315 320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
325 330 335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
340 345 350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
355 360 365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
370 375 380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

385	390	395	400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala			
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Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg			
420	425	430	
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His			
435	440	445	
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn			
450	455	460	
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val			
465	470	475	480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Tyr Gln Thr His Lys			
485	490	495	
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile			
500	505	510	
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val			
515	520	525	
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys			
530	535	540	
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser			
545	550	555	560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys			
565	570	575	
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser			
580	585	590	
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg			
595	600	605	
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe			
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<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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180
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240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
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accagg
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<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
 20          25          30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
 35          40          45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
 50          55          60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
 65          70          75          80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
 85          90          95
Thr Leu Phe Pro Ser Gly Thr Arg
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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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120
aaggtttat ataatgccaa taaaaatgtat gattatgaca acgaggagat cttaacctat
180
gaggaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgatttgt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcatctg cagttcctca tacaaccgg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgat ggaactagca tagattctgt acggcaagt
480
atcaactctg gaaaaatatg tcttttaagt cttcgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactacttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttggac
840
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900

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 1080
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 1200
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 1260
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 1380
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 1405

<210> 3370
 <211> 269
 <212> PRT
 <213> Homo sapiens

<400> 3370
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 Lys Lys Asn Lys Lys Arg Lys Lys Val Leu Tyr Asn Ala Asn Lys
 35 40 45
 Asn Asp Asp Tyr Asp Asn Glu Glu Ile Leu Thr Tyr Glu Glu Met Ser
 50 55 60
 Leu Tyr His Gln Pro Ala Asn Arg Lys Arg Pro Ile Ile Leu Ile Gly
 65 70 75 80
 Pro Gln Asn Cys Gly Gln Asn Glu Leu Arg Gln Arg Leu Met Asn Lys
 85 90 95
 Glu Lys Asp Arg Phe Ala Ser Ala Val Pro His Thr Thr Arg Ser Arg
 100 105 110
 Arg Asp Gln Glu Val Ala Gly Arg Asp Tyr His Phe Val Ser Arg Gln
 115 120 125
 Ala Phe Glu Ala Asp Ile Ala Ala Gly Lys Phe Ile Glu His Gly Glu
 130 135 140
 Phe Glu Lys Asn Leu Tyr Gly Thr Ser Ile Asp Ser Val Arg Gln Val
 145 150 155 160
 Ile Asn Ser Gly Lys Ile Cys Leu Leu Ser Leu Arg Thr Gln Ser Leu
 165 170 175
 Lys Thr Leu Arg Asn Ser Asp Leu Lys Pro Tyr Ile Ile Phe Ile Ala
 180 185 190
 Pro Pro Ser Gln Glu Arg Leu Arg Ala Leu Leu Ala Lys Glu Gly Lys
 195 200 205
 Asn Pro Lys Pro Glu Glu Leu Arg Glu Ile Ile Glu Lys Thr Arg Glu
 210 215 220
 Met Glu Gln Asn Asn Gly His Tyr Phe Asp Thr Ala Ile Val Asn Ser

225	230	235	240
Asp Leu Asp Lys Ala Tyr Gln Glu	Leu Leu Arg	Leu Ile Asn Lys	Leu
	245	250	255
Asp Thr Glu Pro Gln Trp Val Pro Ser Thr Trp	Leu Arg		
	260	265	

<210> 3371
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3371
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120
ggtttcaaaa gtccgggtggc ctggggctgt atggtcccac cccctgggg ggttgaggaa
180
gttgctgtcg tctgaggtac tgccgtacgt gtagtcctgg tccccgctt tgcctggcc
240
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360
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420
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480
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540
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600
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<210> 3372
<211> 198
<212> PRT
<213> Homo sapiens

<400> 3372
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20 25 30
Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg
35 40 45
Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

50	55	60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile		
65	70	75
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro		80
85	90	95
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp		
100	105	110
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp		
115	120	125
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro		
130	135	140
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys		
145	150	155
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu		160
165	170	175
Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr		
180	185	190
Arg Ser Cys Gly Tyr Ala		
195		

<210> 3373

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3373

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 720
 atgcata
 726

<210> 3374

<211> 84
<212> PRT
<213> Homo sapiens

<400> 3374
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20 25 30
Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
35 40 45
Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
50 55 60
Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
65 70 75 80
Gly Arg Gly Leu

<210> 3375
<211> 393
<212> DNA
<213> Homo sapiens

<400> 3375
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gcacatgtgc ccacacactc agcaactcaca ccccgccctg caggctcage cccactcctg
120
agccacactgc ctgggctttg gggggcccagc cggcatgggg agccccagggc tccagctggc
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393

<210> 3376
<211> 103
<212> PRT
<213> Homo sapiens

<400> 3376
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Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr
20 25 30
Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala
35 40 45
Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
50 55 60
Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

<210> 3377

<211> 5235

<212> DNA

<213> Homo sapiens

<400> 3377

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120

tgacaggaaa tttcggggaa ctaaaaaggc tggaagaaca tgaagatgga gcagtctaa
180

accacccact caaggaccat ctccttcacg accatccaca cgagactcg attgtctgaa
240

ttgagctatc gcaacttaat gctaaaagct ccttaaagct acagatattat gacatagttc
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cttccaaat attacatcat aaatcattga gaagattaaa aaaaaacact tgaagaatt
360

gtatgtttaa acatctctgc atatattttg gatagctactt aggtttacttt aactgtcatt
420

aaggagcaca gacttactga agctttactg gacagaatcc tggaaatcg atatcattat
480

aaggttatat ttcccgatgg gcgggttgaag ggctggagac ctatggcag tcatgtttt
540

cacaattac agcagcttga atcgagccca gctaacccttta gaatatcttc acacaaatcc
600

gtaagtatcc tcttaggtgcc actggaggcaa ccagtaactc gtttccttgcat attataatggaa
660

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720
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1260

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<210> 3378
<211> 970
<212> PRT
<213> Homo sapiens

<400> 3378
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Thr Gln Ile Gly Gln Tyr Gly Asn Gly Leu Lys Ser Gly Ser Met Arg
   35          40          45
Ile Gly Lys Asp Phe Ile Leu Phe Thr Lys Lys Glu Asp Thr Met Thr
   50          55          60
Cys Leu Phe Leu Ser Arg Thr Phe His Glu Glu Glu Gly Ile Asp Glu
   65          70          75          80
Val Ile Val Pro Leu Pro Thr Trp Asn Ala Arg Thr Arg Glu Pro Val
   85          90          95
Thr Asp Asn Val Glu Lys Phe Ala Ile Glu Thr Glu Leu Ile Tyr Lys
  100          105         110
Tyr Ser Pro Phe Arg Thr Glu Glu Glu Val Met Thr Gln Phe Met Lys
  115          120         125
Ile Pro Gly Asp Ser Gly Thr Leu Val Ile Ile Phe Asn Leu Lys Leu
  130          135         140
Met Asp Asn Gly Glu Pro Glu Leu Asp Ile Ile Ser Asn Pro Arg Asp
  145          150         155         160
Ile Gln Met Ala Glu Thr Ser Pro Glu Gly Thr Lys Pro Glu Arg Arg

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	165	170	175
Ser Phe Arg Ala Tyr Ala Ala Val Leu Tyr Ile Asp Pro Arg Met Arg			
180	185	190	
Ile Phe Ile His Gly His Lys Val Gln Thr Lys Arg Leu Ser Cys Cys			
195	200	205	
Leu Tyr Lys Pro Arg Met Tyr Lys Tyr Thr Ser Ser Arg Phe Lys Thr			
210	215	220	
Arg Ala Glu Gln Glu Val Arg Ile Ala Val His Val Ala Arg Ile Ala			
225	230	235	240
Glu Glu Lys Ala Arg Glu Ala Glu Ser Lys Ala Arg Thr Leu Glu Val			
245	250	255	
Arg Leu Gly Gly Asp Leu Thr Arg Asp Ser Arg Val Met Leu Arg Gln			
260	265	270	
Val Gln Asn Arg Ala Ile Thr Leu Arg Arg Glu Ala Asp Val Lys Lys			
275	280	285	
Arg Ile Lys Glu Ala Lys Gln Arg Ala Leu Lys Glu Pro Lys Glu Leu			
290	295	300	
Asn Phe Val Phe Gly Val Asn Ile Glu His Arg Asp Leu Asp Gly Met			
305	310	315	320
Phe Ile Tyr Asn Cys Ser Arg Leu Ile Lys Met Tyr Glu Lys Val Gly			
325	330	335	
Pro Gln Leu Glu Gly Gly Met Ala Cys Gly Val Val Gly Val Val			
340	345	350	
Asp Val Pro Tyr Leu Val Leu Glu Pro Thr His Asn Lys Gln Asp Phe			
355	360	365	
Ala Asp Ala Lys Glu Tyr Arg His Leu Leu Arg Ala Met Gly Glu His			
370	375	380	
Leu Ala Gln Tyr Trp Lys Asp Ile Ala Ile Ala Gln Arg Gly Ile Ile			
385	390	395	400
Lys Phe Trp Asp Glu Phe Gly Tyr Leu Ser Ala Asn Trp Asn Gln Pro			
405	410	415	
Pro Ser Ser Glu Leu Arg Tyr Lys Arg Arg Arg Ala Met Glu Ile Pro			
420	425	430	
Thr Thr Ile Gln Cys Asp Leu Cys Leu Lys Trp Arg Thr Leu Pro Phe			
435	440	445	
Gln Leu Ser Ser Val Glu Lys Asp Tyr Pro Asp Thr Trp Val Cys Ser			
450	455	460	
Met Asn Pro Asp Pro Glu Gln Asp Arg Cys Glu Ala Ser Glu Gln Lys			
465	470	475	480
Gln Lys Val Pro Leu Gly Thr Phe Arg Lys Asp Met Lys Thr Gln Glu			
485	490	495	
Glu Lys Gln Lys Gln Leu Thr Glu Lys Ile Arg Gln Gln Glu Lys			
500	505	510	
Leu Glu Ala Leu Gln Lys Thr Thr Pro Ile Arg Ser Gln Ala Asp Leu			
515	520	525	
Lys Lys Leu Pro Leu Glu Val Thr Thr Arg Pro Ser Thr Glu Glu Pro			
530	535	540	
Val Arg Arg Pro Gln Arg Pro Arg Ser Pro Pro Leu Pro Ala Val Ile			
545	550	555	560
Arg Asn Ala Pro Ser Arg Pro Pro Ser Leu Pro Thr Pro Arg Pro Ala			
565	570	575	
Ser Gln Pro Arg Lys Ala Pro Val Ile Ser Ser Thr Pro Lys Leu Pro			
580	585	590	
Ala Leu Ala Ala Arg Glu Glu Ala Ser Thr Ser Arg Leu Leu Gln Pro			

595	600	605
Pro Glu Ala Pro Arg Lys Pro Ala Asn Thr Leu Val Lys Thr Ala Ser		
610	615	620
Arg Pro Ala Pro Leu Val Gln Gln Leu Ser Pro Ser Leu Leu Pro Asn		
625	630	635
Ser Lys Ser Pro Arg Glu Val Pro Ser Pro Lys Val Ile Lys Thr Pro		
645	650	655
Val Val Lys Lys Thr Glu Ser Pro Ile Lys Leu Ser Pro Ala Thr Pro		
660	665	670
Ser Arg Lys Arg Ser Val Ala Val Ser Asp Glu Glu Val Glu Glu		
675	680	685
Glu Ala Glu Arg Arg Lys Glu Arg Cys Lys Arg Gly Arg Phe Val Val		
690	695	700
Lys Glu Glu Lys Lys Asp Ser Asn Glu Leu Ser Asp Ser Ala Gly Gly		
705	710	715
Glu Asp Ser Ala Asp Leu Lys Arg Ala Gln Lys Asp Lys Gly Leu His		
725	730	735
Val Glu Val Arg Val Asn Arg Glu Trp Tyr Thr Gly Arg Val Thr Ala		
740	745	750
Val Glu Val Gly Lys His Val Val Arg Trp Lys Val Lys Phe Asp Tyr		
755	760	765
Val Pro Thr Asp Thr Thr Pro Arg Asp Arg Trp Val Glu Lys Gly Ser		
770	775	780
Glu Asp Val Arg Leu Met Lys Pro Pro Ser Pro Glu His Gln Ser Leu		
785	790	795
Asp Thr Gln Gln Glu Gly Glu Glu Val Gly Pro Val Ala Gln		
805	810	815
Gln Ala Ile Ala Val Ala Glu Pro Ser Thr Ser Glu Cys Leu Arg Ile		
820	825	830
Glu Pro Asp Thr Thr Ala Leu Ser Thr Asn His Glu Thr Ile Asp Leu		
835	840	845
Leu Val Gln Ile Leu Arg Asn Cys Leu Arg Tyr Phe Leu Pro Pro Ser		
850	855	860
Phe Pro Ile Ser Lys Lys Gln Leu Ser Ala Met Asn Ser Asp Glu Leu		
865	870	875
Ile Ser Phe Pro Leu Lys Glu Tyr Phe Lys Gln Tyr Glu Val Gly Leu		
885	890	895
Gln Asn Leu Cys Asn Ser Tyr Gln Ser Arg Ala Asp Ser Arg Ala Lys		
900	905	910
Ala Ser Glu Glu Ser Leu Arg Thr Ser Glu Arg Lys Leu Arg Glu Thr		
915	920	925
Glu Glu Lys Leu Gln Lys Leu Arg Thr Asn Ile Val Ala Leu Leu Gln		
930	935	940
Lys Val Gln Glu Asp Ile Asp Ile Asn Thr Asp Asp Glu Leu Asp Ala		
945	950	955
Tyr Ile Glu Asp Leu Ile Thr Lys Gly Asp		
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<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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 180
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 240
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 300
 360
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 420
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 480
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 540
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 720
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 780
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<210> 3380
 <211> 299
 <212> PRT
 <213> Homo sapiens

<400> 3380
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 35 40 45
 Ser Glu Asp Ala Leu Leu Gly Ser Glu Ile Ala Gln Val Thr Gly Asn
 50 55 60
 Asp Val Asp Ser Gly Pro Val Leu Trp Tyr Val Leu Ser Pro Ser Gly
 65 70 75 80
 Pro Gln Asp Pro Phe Ser Val Gly Arg Tyr Gly Gly Arg Val Ser Leu
 85 90 95
 Thr Gly Pro Leu Asp Phe Glu Gln Cys Asp Arg Tyr Gln Leu Gln Leu
 100 105 110
 Leu Ala His Asp Gly Pro His Glu Gly Arg Ala Xaa Leu Thr Val Leu
 115 120 125
 Val Glu Asp Val Asn Asp Asn Ala Pro Ala Phe Ser Gln Ser Leu Tyr

130	135	140
Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser		
145	150	155
Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr		160
165	170	175
His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly		
180	185	190
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser		
195	200	205
Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val		
210	215	220
Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp		
225	230	235
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu		240
245	250	255
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala		
260	265	270
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly		
275	280	285
Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg		
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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120
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180
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240
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300
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360
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420
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480
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720
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<210> 3382
 <211> 279
 <212> PRT
 <213> Homo sapiens

<400> 3382
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 35 40 45
 Arg Val Val Pro Gly Ile Val Tyr Leu Gly His Ile Pro Pro Arg Phe
 50 55 60
 Arg Pro Leu His Val Arg Asn Leu Leu Ser Ala Tyr Gly Glu Val Gly
 65 70 75 80
 Arg Val Phe Phe Gln Ala Glu Asp Arg Phe Val Arg Arg Lys Lys Lys
 85 90 95
 Ala Ala Ala Ala Gly Gly Lys Lys Arg Ser Tyr Thr Lys Asp Tyr
 100 105 110
 Thr Glu Gly Trp Val Glu Phe Arg Asp Lys Arg Ile Ala Lys Arg Val
 115 120 125
 Ala Ala Ser Leu His Asn Thr Pro Met Gly Ala Arg Arg Ser Pro
 130 135 140
 Phe Arg Tyr Asp Leu Trp Asn Leu Lys Tyr Leu His Arg Phe Thr Trp
 145 150 155 160
 Ser His Leu Ser Glu His Leu Ala Phe Glu Arg Gln Val Arg Arg Gln
 165 170 175
 Arg Leu Arg Ala Glu Val Ala Gln Ala Lys Arg Glu Thr Asp Phe Tyr
 180 185 190
 Leu Gln Ser Val Glu Arg Gly Gln Arg Phe Leu Ala Ala Asp Gly Asp
 195 200 205
 Pro Ala Arg Pro Asp Gly Ser Trp Thr Phe Ala Gln Arg Pro Thr Glu

210	215	220
Gln	Glu	Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
225	230	235
Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu		240
245	250	255
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly		
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Pro Ser Leu Val Arg Asp Ser		
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<210> 3383

<211> 309

<212> DNA

<213> Homo sapiens

<400> 3383

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120
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180
ctggggagctg tcctgcccccc gatctcccac acaaacaactc cagcatgaaa gagcgagact
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309

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<210> 3384

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3384

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								20	25						30
Asn	Ala	His	Phe	Leu	Thr	Ser	Phe	Val	Leu	Glu	His	Arg	Ile	Thr	Ala
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Asn	Ala	His	Pro	Trp	Glu	Leu	Ser	Cys	Pro	Arg	Ser	Pro	Thr	Gln	Thr
								40							45
Leu	Gln	His	Glu	Arg	Ala	Arg	Leu	Asn	Leu	Lys	Lys	Lys	Lys	Phe	Arg
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Ala	Pro	Glu	Gln	Glu	Leu	Val	Ser	Ile	Ile	Asn	Ser	Glu	Ser		
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<210> 3385

<211> 720

<212> DNA

<213> Homo sapiens

<400> 3385

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<210> 3386
 <211> 188
 <212> PRT
 <213> Homo sapiens

<400> 3386
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 Gln Pro Pro Ala Ser Ala Thr Thr Pro Val Pro Leu Ala Arg Phe Phe
 35 40 45
 Val Asn Phe Pro Ser Ala Lys Gln Tyr Phe Ser Gln Phe Lys His Met
 50 55 60
 Glu Asp Pro Leu Glu Met Glu Arg Ser Pro Gln Leu Arg Lys His Ala
 65 70 75 80
 Cys Arg Val Met Gly Ala Leu Asn Thr Val Val Glu Asn Leu His Asp
 85 90 95
 Pro Asp Lys Val Ser Ser Val Leu Ala Leu Val Gly Lys Ala His Ala
 100 105 110
 Leu Lys His Lys Val Glu Pro Val Tyr Phe Lys Ile Leu Ser Gly Val
 115 120 125
 Ile Leu Glu Val Val Ala Glu Glu Phe Ala Ser Asp Phe Pro Pro Glu
 130 135 140
 Thr Gln Arg Ala Trp Ala Lys Leu Arg Gly Leu Ile Tyr Ser His Val
 145 150 155 160
 Thr Ala Ala Tyr Lys Glu Val Gly Trp Val Gln Gln Val Pro Asn Ala
 165 170 175
 Thr Thr Pro Pro Ala Thr Leu Pro Ser Ser Gly Pro

180

185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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120
ggaagaggcc tcttattagg gctctggtgg cggcggcggc ggacccttgg ggtctggacg
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240
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300
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360
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420
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 3299

<210> 3388
<211> 153
<212> PRT
<213> Homo sapiens

<400> 3388
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 20 25 30
 Leu Arg Val Val Leu Ala Leu Arg Gly Arg Glu Glu Val Ser Asp Ala
 35 40 45
 Gly Cys Gly Gly Pro Arg Ile Thr Ile Asn Lys Asp Thr Lys Val Pro
 50 55 60
 Asn Ala Cys Leu Phe Thr Ile Asn Lys Glu Asp His Thr Leu Gly Asn
 65 70 75 80
 Ile Ile Lys Ser Gln Leu Leu Lys Asp Pro Gln Val Leu Phe Ala Gly
 85 90 95
 Tyr Lys Val Pro His Pro Leu Glu His Lys Ile Ile Arg Val Gln
 100 105 110
 Thr Thr Pro Asp Tyr Ser Pro Gln Glu Ala Phe Thr Asn Ala Ile Thr
 115 120 125
 Asp Leu Ile Ser Glu Leu Ser Leu Leu Glu Glu Arg Phe Arg Val Ala
 130 135 140
 Ile Lys Asp Lys Gln Glu Gly Ile Glu
 145 150

<210> 3389
<211> 308
<212> DNA
<213> Homo sapiens

<400> 3389
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 180
 gacggggAAC cttctgacca gcctcatggg ctcctcagag caggaggatg gggaggagag
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cggtcgac

308

<210> 3390

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3390

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Leu	Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	
20										25				30		
Thr	Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	
35										40				45		
Leu	Leu	Asn	Phe	Ile	Trp	Phe	Leu	Leu	Leu	Ala	Val	Asp	Gly	Glu	Pro	
50										55				60		
Ser	Asp	Gln	Pro	His	Gly	Leu	Leu	Arg	Ala	Gly	Gly	Trp	Gly	Glu		
65										70				75		80
Pro	Gln	Arg	Arg	Gln	Pro	His	Arg	Ala	Gly	Leu	Asn	Trp	Pro	Gly	His	
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Val	Glu	Thr	Pro	Arg	Ser											
						100										

<210> 3391

<211> 1295

<212> DNA

<213> Homo sapiens

<400> 3391

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120						
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180						
agtcttcttc	acttacaggg	tgccattgaa	gactggaata	atgaaagcag	catgccctgt	
240						
tgtgtccttc	agcttggaga	tatcatcgat	ggatataatg	cacagtataaa	tgcataccaa	
300						
aagtccctag	aacttgttat	ggacatgttc	aagaggctta	aagttccagt	tcatcataca	
360						
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420						
actaagtttc	tagaagatca	gattgtacat	catcctgaga	ccatgccttc	agaagattat	
480						
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540						
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600						
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660						
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720						

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 1200
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 1295

<210> 3392
 <211> 355
 <212> PRT
 <213> Homo sapiens

<400> 3392
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 20 25 30
 Phe Gly Val Ile Ala Asp Val Gln Phe Ala Asp Leu Glu Asp Gly Phe
 35 40 45
 Asn Phe Gln Gly Thr Arg Arg Arg Tyr Tyr Arg His Ser Leu Leu His
 50 55 60
 Leu Gln Gly Ala Ile Glu Asp Trp Asn Asn Glu Ser Ser Met Pro Cys
 65 70 75 80
 Cys Val Leu Gln Leu Gly Asp Ile Ile Asp Gly Tyr Asn Ala Gln Tyr
 85 90 95
 Asn Ala Ser Lys Lys Ser Leu Glu Leu Val Met Asp Met Phe Lys Arg
 100 105 110
 Leu Lys Val Pro Val His His Thr Trp Gly Asn His Glu Phe Tyr Asn
 115 120 125
 Phe Ser Arg Glu Tyr Leu Thr His Ser Lys Leu Asn Thr Lys Phe Leu
 130 135 140
 Glu Asp Gln Ile Val His His Pro Glu Thr Met Pro Ser Glu Asp Tyr
 145 150 155 160
 Tyr Ala Tyr His Phe Val Pro Phe Pro Lys Phe Arg Phe Ile Leu Leu
 165 170 175
 Asp Ala Tyr Asp Leu Ser Val Leu Gly Val Asp Gln Ser Ser Pro Lys
 180 185 190
 Tyr Glu Gln Cys Met Lys Ile Leu Arg Glu His Asn Pro Asn Thr Glu
 195 200 205
 Leu Asn Ser Pro Gln Gly Leu Ser Glu Pro Gln Phe Val Gln Phe Asn

210	215	220
Gly	Gly	Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr
225	230	235
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro		240
245	250	255
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		
260	265	270
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		
275	280	285
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val		
290	295	300
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		
305	310	315
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
325	330	335
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala		
340	345	350
Phe His Cys		
355		

<210> 3393

<211> 510

<212> DNA

<213> Homo sapiens

<400> 3393

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120
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240
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420
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<210> 3394

<211> 170

<212> PRT

<213> Homo sapiens

<400> 3394

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Cys	Arg	Leu	Gly	Met	Gly	Pro	Gly	Xaa	Val	Thr	Pro	Ser	Ser	Phe	Val

20	25	30
Gly Val Trp Ala Gly Ala Thr Ala Ser Arg Gly	Gly Ser Asn Phe Glu	
35	40	45
Tyr Leu Lys Arg Glu His Ser Leu Ser Lys Pro	Tyr Gln Gly Val Gly	
50	55	60
Thr Gly Ser Ser Ser Leu Trp Asn Leu Met	Gly Asn Xaa Met Val Met	
65	70	75
Thr Gln Tyr Ile Arg Leu Thr Pro Asp Met	Gln Ser Lys Gln Gly Ala	80
85	90	95
Leu Trp Asn Arg Val Pro Cys Phe Leu Arg Asp	Trp Glu Leu Gln Val	
100	105	110
His Phe Lys Ile His Gly Gln Gly Lys Lys Asn	Leu His Gly Asp Gly	
115	120	125
Leu Ala Ile Trp Tyr Thr Lys Asp Arg Met	Gln Pro Gly Pro Val Phe	
130	135	140
Gly Asn Met Asp Lys Phe Val Gly Leu Gly Val	Phe Val Asp Thr Tyr	
145	150	155
Pro Asn Glu Glu Lys Gln Pro Phe Thr Arg		160
165	170	

<210> 3395

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3395

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420
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540
540
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600
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720
720
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807

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<210> 3396
<211> 205
<212> PRT
<213> Homo sapiens

<400> 3396
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Leu Asn Asp Thr Tyr His Ser Arg Asp Ser Ser Phe Arg Leu Asp Ser
35 40 45
Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
50 55 60
Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
65 70 75 80
Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
85 90 95
Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
100 105 110
Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
115 120 125
Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
130 135 140
Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
145 150 155 160
Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
165 170 175
Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
180 185 190
Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu
195 200 205

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<210> 3397
<211> 492
<212> DNA
<213> Homo sapiens

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360
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420
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 480
 ctttaccat gg
 492

<210> 3398
<211> 163
<212> PRT
<213> Homo sapiens

<400> 3398
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Thr Leu Cys Ser Val Pro Ser Leu Glu Gln Gln Pro Gly Xaa Ala
 35 40 45
Ala Ser Ala Ile Pro Ser Trp Leu Leu Asn Asp Pro Gly Val Glu Xaa
 50 55 60
Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
 65 70 80
Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
 85 90 95
Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
 100 105 110
Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
 115 120 125
Ala Ser Gly Cys Pro Arg Thr Glu Glu Ala Ala Trp Gly Glu Ile Leu
 130 135 140
Arg Glu Gly Leu Ser Ser Pro Cys Ser Cys Ser Pro Gly Pro Pro Gly
 145 150 160
Lys Leu Gly

<210> 3399
<211> 5784
<212> DNA
<213> Homo sapiens

<400> 3399
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 420

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4260
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4680
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4740
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4860
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5160
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5280

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 5340
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 5400
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 5520
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 5640
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 5784

<210> 3400
 <211> 1069
 <212> PRT
 <213> Homo sapiens

<400> 3400
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 Ile Ser Leu Leu Ser Ala Leu Asn Glu Glu Arg Leu Lys Gly Gln Leu
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 Cys Asp Val Leu Leu Ile Val Gly Asp Gln Lys Phe Arg Ala His Lys
 35 40 45
 Asn Val Leu Ala Ala Ser Ser Glu Tyr Phe Gln Ser Leu Phe Thr Asn
 50 55 60
 Lys Glu Asn Glu Ser Gln Thr Val Phe Gln Leu Asp Phe Cys Glu Pro
 65 70 75 80
 Asp Ala Phe Asp Asn Val Leu Asn Tyr Ile Tyr Ser Ser Leu Phe
 85 90 95
 Val Glu Lys Ser Ser Leu Ala Ala Val Gln Glu Leu Gly Tyr Ser Leu
 100 105 110
 Gly Ile Ser Phe Leu Thr Asn Ile Val Ser Lys Thr Pro Gln Ala Pro
 115 120 125
 Phe Pro Thr Cys Pro Asn Arg Lys Lys Val Phe Val Glu Asp Asp Glu
 130 135 140
 Asn Ser Ser Gln Lys Arg Ser Val Ile Val Cys Gln Ser Arg Asn Glu
 145 150 155 160
 Ala Gln Gly Lys Thr Val Ser Gln Asn Gln Pro Asp Val Ser His Thr
 165 170 175
 Ser Arg Pro Ser Pro Ser Ile Ala Val Lys Ala Asn Thr Asn Lys Pro
 180 185 190
 His Val Pro Lys Pro Ile Glu Pro Leu His Asn Leu Ser Leu Thr Glu
 195 200 205
 Lys Ser Trp Pro Lys Asp Ser Ser Val Val Tyr Ala Lys Ser Leu Glu
 210 215 220
 His Ser Gly Ser Leu Asp Asp Pro Asn Arg Ile Ser Leu Val Lys Arg

225	230	235	240
Asn Ala Val Leu Pro Ser Lys Pro Leu Gln Asp Arg Glu Ala Met Asp			
245	250	255	
Asp Lys Pro Gly Val Ser Gly Gln Leu Pro Lys Gly Lys Ala Leu Glu			
260	265	270	
Leu Ala Leu Lys Arg Pro Arg Pro Pro Val Leu Ser Val Cys Ser Ser			
275	280	285	
Ser Glu Thr Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln			
290	295	300	
Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile			
305	310	315	320
Pro Ser Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly			
325	330	335	
Pro Leu Val Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln			
340	345	350	
Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser			
355	360	365	
Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser			
370	375	380	
Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp			
385	390	395	400
Arg Pro Gln Val Leu Gln Pro His Arg Leu Arg Ser Phe Ser Ala Ser			
405	410	415	
Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile			
420	425	430	
Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg			
435	440	445	
Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ala Ser Ser Ser Ser			
450	455	460	
Val Thr Arg Asp Leu Ser Leu Lys Thr Glu Asp Asp Gln Lys Asp Met			
465	470	475	480
Ser Arg Leu Pro Ala Lys Arg Arg Phe Gln Ala Asp Arg Arg Leu Pro			
485	490	495	
Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp			
500	505	510	
Asn Phe Glu Glu Gly Ser Ser Pro Thr Leu Leu Asp Ala Asp Phe Pro			
515	520	525	
Asp Ser Asp Leu Asn Lys Asp Glu Phe Gly Glu Leu Glu Gly Thr Arg			
530	535	540	
Pro Asn Lys Lys Phe Lys Cys Lys His Cys Leu Lys Ile Phe Arg Ser			
545	550	555	560
Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys			
565	570	575	
Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys			
580	585	590	
Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser			
595	600	605	
Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys			
610	615	620	
Leu Ile Asp Ile Val Arg Glu Arg Glu Ile Lys Lys Ala Leu Ile Ile			
625	630	635	640
Lys Leu Arg Arg Gly Lys Pro Gly Phe Gln Gly Gln Ser Ser Ser Gln			
645	650	655	
Ala Gln Gln Val Ile Lys Arg Asn Leu Arg Ser Arg Ala Lys Gly Ala			

660	665	670
Tyr Ile Cys Thr Tyr Cys Gly Lys Ala Tyr Arg Phe Leu Ser Gln Phe		
675	680	685
Lys Gln His Ile Lys Met His Pro Gly Glu Lys Pro Leu Gly Val Asn		
690	695	700
Lys Val Ala Lys Pro Lys Glu His Ala Pro Leu Ala Ser Pro Val Glu		
705	710	715
Asn Lys Glu Val Tyr Gln Cys Arg Leu Cys Asn Ala Lys Leu Ser Ser		
725	730	735
Leu Leu Glu Gln Gly Ser His Glu Arg Leu Cys Arg Asn Ala Ala Val		
740	745	750
Cys Pro Tyr Cys Ser Leu Arg Phe Phe Ser Pro Glu Leu Lys Gln Glu		
755	760	765
His Glu Ser Lys Cys Glu Tyr Lys Lys Leu Thr Cys Leu Glu Cys Met		
770	775	780
Arg Thr Phe Lys Ser Ser Phe Ser Ile Trp Arg His Gln Val Glu Val		
785	790	795
His Asn Gln Asn Asn Met Ala Pro Thr Glu Asn Phe Ser Leu Pro Val		
805	810	815
Leu Asp His Asn Gly Asp Val Thr Gly Ser Ser Arg Pro Gln Ser Gln		
820	825	830
Pro Glu Pro Asn Lys Val Asn His Ile Val Thr Thr Lys Asp Asp Asn		
835	840	845
Val Phe Ser Asp Ser Ser Glu Gln Val Asn Phe Asp Ser Glu Asp Ser		
850	855	860
Ser Cys Leu Pro Glu Asp Leu Ser Leu Ser Lys Gln Leu Lys Ile Gln		
865	870	875
Val Lys Glu Glu Pro Val Glu Glu Ala Glu Glu Glu Ala Pro Glu Ala		
885	890	895
Ser Thr Ala Pro Lys Glu Ala Gly Pro Ser Lys Glu Ala Ser Leu Trp		
900	905	910
Pro Cys Glu Lys Cys Gly Lys Met Phe Thr Val His Lys Gln Leu Glu		
915	920	925
Arg His Gln Glu Leu Leu Cys Ser Val Lys Pro Phe Ile Cys His Val		
930	935	940
Cys Asn Lys Ala Phe Arg Thr Asn Phe Arg Leu Trp Ser His Phe Gln		
945	950	955
Ser His Met Ser Gln Ala Ser Glu Glu Ser Ala His Lys Glu Ser Glu		
965	970	975
Val Cys Pro Val Pro Thr Asn Ser Pro Ser Pro Pro Pro Leu Pro Pro		
980	985	990
Pro Pro Pro Leu Pro Lys Ile Gln Pro Leu Glu Pro Asp Ser Pro Thr		
995	1000	1005
Gly Leu Ser Glu Asn Pro Thr Pro Ala Thr Glu Lys Leu Phe Val Pro		
1010	1015	1020
Gln Glu Ser Asp Thr Leu Phe Tyr His Ala Pro Pro Leu Ser Ala Ile		
1025	1030	1035
Thr Phe Lys Arg Gln Phe Met Cys Lys Leu Cys His Arg Thr Phe Lys		
1045	1050	1055
Thr Ala Phe Ser Leu Trp Ser His Glu Gln Thr His Asn		
1060	1065	

<210> 3401

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401
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 120
 gaagttata ctaggcttgg agaaatgaac aatgctgtga gaaacctcca agaactctta
 180
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctgttgaaa actctgtagg
 240
 ctgattaatg aagatgtgaa tgagcaggtt atgcaggtat taggacctga agacctccag
 300
 agcattatct acaaatttggaa agaacacgag gaattttcc cagcattca ggcatttact
 360
 aatgatctac ttgaaatctt agaaatttgc gactctggat gccattgtac ctgcagtaaa
 420
 gaaaattaaaa gtactttcat actgaaaaca aatcaaatca ttttactgt gtaaatttgc
 480
 ttcttaacat tttgtatccc gtaggattga tcttattttg agacaagggt tgtaaaatgt
 540
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 579

<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402
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 20 25 30
 Val Tyr Thr Arg Leu Gly Glu Met Asn Asn Ala Val Arg Asn Leu Gln
 35 40 45
 Glu Leu Leu Glu Leu Asp Ser Ser Ser Ser Leu Cys Val Leu Val Ser
 50 55 60
 Thr Val Gly Lys Leu Cys Arg Leu Ile Asn Glu Asp Val Asn Glu Gln
 65 70 75 80
 Val Met Gln Val Leu Gly Pro Glu Asp Leu Gln Ser Ile Ile Tyr Lys
 85 90 95
 Leu Glu Glu His Glu Glu Phe Phe Pro Ala Phe Gln Ala Phe Thr Asn
 100 105 110
 Asp Leu Leu Glu Ile Leu Glu Ile Asp Asp Ser Gly Cys His Cys Thr
 115 120 125
 Cys Ser Lys Glu Ile Lys Ser Thr Phe Ile Leu Lys Thr Asn Gln Ile
 130 135 140
 Ile Phe Thr Val
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<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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120
accatggccc gaaatgcaga aaaggccatg acggccttag caagatttcg ccaggctcag
180
ctggaagagg gaaaagtgaa ggaacgaaga cccttctgg cctcagaatg tactgaactg
240
cctaaagctg agaagtggag acgacagatc attggagaga tctctaaaaa agtggctcag
300
attcagaatg ctgggtttagg tgaatttcga attcgtgacc tgaatgatga aattaacaag
360
ctgctaaggg agaaaggaca ctgggaggc cggataaaagg agctgggagg tcctgattat
420
ggaaaagttg gccctaaaat gctggatcat gaaggaaaag aagtcccagg aaaccgaggt
480
tacaagtact ttggagcagc aaaagatttgc cctgggttta gagagctgtt tgaaaaanga
540
acctttccct cctcccagnn aaagacacgt gctgagctca tgaaggcaat cgatttttag
600
tactatggtt accttagatga agatgatggt gttattgtgc ctttggaaaca ggaatatgaa
660
aagaaactca gagccgagtt agtggaaaag tggaaagcag agagagaggc tcggctggca
720
agaggagaaa aggaagagga ggaggaagag gaggaagaga tcaacatcta tgcagtcacc
780
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840
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900
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960
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1020
cccagtggta cctcaggacc cagggctgca gacacaggct ggtgctgcaa gggctcctgc
1080
cccattctca gccttccttc ccttccttg tctcatgtt accggagggt aggggtctgt
1140
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1200
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1380
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1440
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1500

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1560
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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Gln	Ala	Gln	Leu	Glu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu
					20				25					30	
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
					35				40					45	
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
					50				55					60	
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65					70				75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
					85				90					95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
					100				105					110	
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
					115				120					125	
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
					130				135					140	
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145					150				155					160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
					165				170					175	
Glu	Tyr	Glu	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala	
					180				185					190	
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	
					195				200					205	
Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp	
					210				215					220	
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225					230				235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
					245				250					255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
					260				265					270	
Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
					275				280					285	

<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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 120
 aacctgctcg cctccatccg taagggcaat gccattgacg aagcggacat cccgccgcca
 180
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 240
 gcccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
 300
 gccccagcct catctccagg cttggctaag ccccagatgc ccccaggtcc ctgcagccct
 360
 ccctctggcc cagttgcaga gccgccagcg cgactacaag ct
 402

<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

Gly	Trp	Glu	Ala	Pro	Leu	Gln	Glu	Arg	Leu	Ala	Phe	Tyr	Gln	Thr	Ala
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Ile	Glu	Ser	Ala	Arg	Gln	Ala	Gly	Asp	Ser	Ala	Lys	Met	Arg	Arg	Tyr
									20			25		30	
Asp	Arg	Gly	Leu	Lys	Thr	Leu	Glu	Asn	Leu	Leu	Ala	Ser	Ile	Arg	Lys
									35			40		45	
Gly	Asn	Ala	Ile	Asp	Glu	Ala	Asp	Ile	Pro	Pro	Pro	Val	Ala	Ile	Gly
									50			55		60	
Lys	Gly	Pro	Ala	Ser	Thr	Pro	Thr	Tyr	Ser	Pro	Ala	Pro	Thr	Gln	Pro
									65			70		75	80
Ala	Pro	Arg	Ile	Ala	Ser	Ala	Pro	Glu	Pro	Arg	Val	Thr	Leu	Glu	Gly
									85			90		95	
Pro	Ser	Ala	Thr	Ala	Pro	Ala	Ser	Ser	Pro	Gly	Leu	Ala	Lys	Pro	Gln
									100			105		110	
Met	Pro	Pro	Gly	Pro	Cys	Ser	Pro	Pro	Ser	Gly	Pro	Val	Ala	Glu	Pro
									115			120		125	
Pro	Ala	Arg	Leu	Gln	Ala										
									130						

<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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 120

gggacccccc ccggacacccc aacccctcg gtggcgaggc aggtggcgcc accgacaggg
 180
 cccgcggggga cctttcccg aancacctggc ctcccttggca agcaggtggc ggcaccaaca
 240
 ggcggggggg ggacccccc cggacacctg gcctccctgg cgaggcagg ggcagaactg
 300
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 360
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgttt aagtatgata
 420
 attcgatttt ggctctgttag ggaaaggctc ttatTTaaa aagatgtgca ctagagaaaa
 480
 aggaaacacgc atgtagcaaa tacatccacg gatgtccctcc tggTTaaaa aaaaa
 535

<210> 3408
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3408
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 Ser Ala Gly Thr Phe Pro Gly His His Ala Phe Ser Ala Val Arg Gln
 20 25 30
 Val Ala Ala Pro Thr Gly Pro Gly Gly Thr Phe Pro Gly His Pro Thr
 35 40 45
 Ser Ser Val Ala Arg Gln Val Ala Ala Pro Thr Gly Pro Ala Gly Thr
 50 55 60
 Phe Pro Gly Xaa Pro Gly Leu Leu Gly Lys Gln Val Ala Ala Pro Thr
 65 70 75 80
 Gly Pro Gly Gly Thr Phe Pro Gly His Leu Ala Ser Ser Ala Arg Gln
 85 90 95
 Val Ala Glu Leu Val Pro Arg Leu Ile Phe Leu Arg Gln Thr Cys Leu
 100 105 110
 Gln Arg Lys Leu Cys Ser Thr Gly Glu Thr Gly Lys Cys Thr Arg Tyr
 115 120 125
 Trp Leu Ile
 130

<210> 3409
 <211> 959
 <212> DNA
 <213> Homo sapiens

<400> 3409
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 acgtttgctt tccaagtgc aactacaga cacgcgcgcg cacacacgcg agcacacgcg
 120
 gagagagagg aacccgtccg gtccgaggca gctctgcgcg tccccctcctg cgcttagcat
 180
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcggggga gcagggcgtg
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccg gggacggcga ggccctcatg
 300
 taccacacgc acttctcaga acttctggat gagtttccc agaacgtctt gggtcagctc
 360
 ctgaatgatc cttecccttc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcgggcc
 480
 cagtcgcct tcacccacat taccaccagt gacagettca atgacgatga ggtggaaagt
 540
 nngagaaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta
 600
 cagacgaacc acccccagga ctogttccgt ctgtcaactt gaccatcaca gccatctcca
 660
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 720
 cagaccatta ttcctaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
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 840
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 900
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 959

<210> 3410
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 3410
 Met Glu Val Leu Glu Ser Gly Glu Gln Gly Val Leu Gln Trp Asp Arg
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 Lys Leu Ser Glu Leu Ser Glu Pro Gly Asp Gly Glu Ala Leu Met Tyr
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 His Thr His Phe Ser Glu Leu Leu Asp Glu Phe Ser Gln Asn Val Leu
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 Gly Gln Leu Leu Asn Asp Pro Phe Leu Ser Glu Lys Ser Val Ser Met
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 Glu Val Glu Pro Ser Pro Thr Ser Pro Ala Pro Leu Ile Gln Ala Glu
 65 70 75 80
 His Ser Tyr Ser Leu Cys Glu Glu Pro Arg Ala Gln Ser Pro Phe Thr
 85 90 95
 His Ile Thr Thr Ser Asp Ser Phe Asn Asp Asp Glu Val Glu Ser Xaa
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<210> 3411
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 <212> DNA
 <213> Homo sapiens

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<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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Thr	Val	Gly	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys	
						35			40					45	
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
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Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
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Met	Val	His	Leu	Val	Cys	Thr	Ser	Arg	Thr	Pro	Pro	Ser	Ser	Pro	Lys
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Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn

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<211> 3344

<212> DNA

<213> Homo sapiens

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 <211> 723
 <212> PRT
 <213> Homo sapiens

<400> 3414
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 35 40 45
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 65 70 75 80
 Pro Ser Val Pro Ala Val Ala Ile Lys Val Phe Cys Ser Gly Cys Lys
 85 90 95
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 100 105 110
 Gln Leu Phe Cys Ser Thr Arg Cys Ile Thr Arg His Ser Ser Pro Ala
 115 120 125
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 130 135 140
 Ile Leu Asn Pro Lys Asp Val Ile Thr Thr Arg Phe Glu Asn Ser Tyr
 145 150 155 160
 Pro Ser Lys Asp Phe Cys Ser Gln Ser Cys Leu Ser Ser Tyr Glu Leu
 165 170 175
 Lys Lys Lys Pro Val Val Thr Ile Tyr Thr Lys Ser Ile Ser Thr Lys
 180 185 190
 Cys Ser Met Cys Gln Lys Asn Ala Asp Thr Arg Phe Glu Val Lys Tyr

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His Ser Thr Asn Asn Leu Thr Thr Asn Cys Cys Glu Asn Cys Gly Ser		
225	230	235
Tyr Cys Tyr Ser Ser Gly Pro Cys Gln Ser Gln Lys Val Phe Ser		
245	250	255
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Tyr Ala Leu Gly Lys Ser Leu Arg Ser Ser Ala Glu Met Ile Glu Asn		
275	280	285
Thr Asn Ser Leu Gly Lys Thr Glu Leu Phe Cys Ser Ile Asn Cys Leu		
290	295	300
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305	310	315
Cys His Ser Cys Lys Thr Ser Ala Ile Pro Gln Tyr His Leu Ala Met		
325	330	335
Ser Asp Gly Thr Ile Tyr Ser Phe Cys Ser Ser Ser Cys Val Val Ala		
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Phe Gln Asn Val Phe Ser Lys Pro Lys Gly Thr Asn Ser Ser Ala Val		
355	360	365
Pro Leu Ser Gln Gly Gln Val Val Val Ser Pro Pro Ser Ser Arg Ser		
370	375	380
Ala Val Ser Ile Gly Gly Asn Thr Ser Ala Val Ser Pro Ser Ser		
385	390	395
Ile Arg Gly Ser Ala Ala Ala Ser Leu Gln Pro Leu Gly Glu Gln Ser		
405	410	415
Gln Gln Val Ala Leu Thr His Thr Val Val Lys Leu Lys Cys Gln His		
420	425	430
Cys Asn His Leu Phe Ala Thr Lys Pro Glu Leu Leu Phe Tyr Lys Gly		
435	440	445
Lys Met Phe Leu Phe Cys Gly Lys Asn Cys Ser Asp Glu Tyr Lys Lys		
450	455	460
Lys Asn Lys Val Val Ala Met Cys Glu Tyr Cys Lys Ile Glu Lys Ile		
465	470	475
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Glu Gly Cys Lys Leu Leu Tyr Lys His Asp Leu Ala Lys Arg Trp Gly		
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Asn His Cys Lys Met Cys Ser Tyr Cys Ser Gln Thr Ser Pro Asn Leu		
515	520	525
Val Gln Asn Arg Leu Glu Gly Lys Leu Glu Glu Phe Cys Cys Glu Asp		
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Cys Met Ser Lys Phe Thr Val Leu Phe Tyr Gln Met Ala Lys Cys Asp		
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Gly Cys Lys Arg Gln Gly Lys Leu Ser Glu Ser Ile Lys Trp Arg Gly		
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580	585	590
Gln Gln Ile Met Asn Asp Cys Leu Pro Gln Asn Lys Val Asn Ile Ser		
595	600	605
Lys Ala Lys Thr Ala Val Thr Glu Leu Pro Ser Ala Arg Thr Asp Thr		
610	615	620
Thr Pro Val Ile Thr Ser Val Met Ser Leu Ala Lys Ile Pro Ala Thr		

625	630	635	640
Leu Ser Thr Gly Asn Thr Asn Ser Val	Leu Lys Gly Ala Val Thr Lys		
645	650	655	
Glu Ala Ala Lys Ile Ile Gln Asp Glu Ser Thr Gln Glu Asp Ala Met			
660	665	670	
Lys Phe Pro Ser Ser Gln Ser Gln Pro Ser Arg Leu Leu Lys Asn			
675	680	685	
Lys Gly Ile Ser Cys Lys Pro Val Thr Gln Thr Lys Ala Thr Ser Cys			
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<210> 3415
<211> 3501
<212> DNA
<213> Homo sapiens

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2640

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Gly Lys Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala		
165	170	175
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln		
180	185	190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val		
195	200	205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln		
210	215	220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys		
225	230	235
Val Gly Cys Gly Ser Pro Arg Ile Xaa Ile Leu Val Asp Ser Leu Arg		
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<210> 3417

<211> 405

<212> DNA

<213> Homo sapiens

<400> 3417

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<210> 3418

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3418

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35 40 45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
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Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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<211> 105
<212> PRT
<213> Homo sapiens

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Cys Asp Thr Val Ala Leu Glu Ser Thr Thr Leu Arg Gly Thr Thr Arg
50 55 60
Glu Val Thr Arg Arg Ser Pro Ile Asn Met Lys His Pro Glu Gln Gly
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Gly Trp Asp Gly Ser Gly Val Asn Arg
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<210> 3421
<211> 2988
<212> DNA
<213> Homo sapiens

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 2988

<210> 3422
 <211> 418
 <212> PRT
 <213> Homo sapiens

<400> 3422
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35	40	45	
Leu Leu Leu Phe Ile Ile Ser Arg Pro Gly Pro Ser Ser Pro Ala Gly			
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Gly Glu Asp Arg Val His Val Leu Val Leu Ser Ser Trp Arg Ser Gly			
65	70	75	80
Ser Ser Phe Leu Gly Gln Leu Phe Ser Gln His Pro Asp Val Phe Tyr			
85	90	95	
Leu Met Glu Pro Ala Trp His Val Trp Thr Thr Leu Ser Gln Gly Ser			
100	105	110	
Ala Ala Thr Leu His Met Ala Val Arg Asp Leu Met Arg Ser Ile Phe			
115	120	125	
Leu Cys Asp Met Asp Val Phe Asp Ala Tyr Met Glu Pro Gly Pro Arg			
130	135	140	
Arg Gln Ser Ser Leu Phe Gln Trp Glu Asn Ser Arg Ala Leu Cys Ser			
145	150	155	160
Ala Pro Ala Cys Asp Ile Ile Pro Gln Asp Glu Ile Ile Pro Arg Ala			
165	170	175	
His Cys Arg Leu Leu Cys Ser Gln Gln Pro Phe Glu Val Val Glu Lys			
180	185	190	
Ala Cys Arg Ser Tyr Ser His Val Val Leu Lys Glu Val Arg Phe Phe			
195	200	205	
Asn Leu Gln Ser Leu Tyr Pro Leu Leu Lys Asp Pro Ser Leu Asn Leu			
210	215	220	
His Ile Val His Leu Val Arg Asp Pro Arg Ala Val Leu Arg Ser Arg			
225	230	235	240
Glu Ala Ala Gly Pro Ile Leu Ala Arg Asp Asn Gly Ile Val Leu Gly			
245	250	255	
Thr Asn Gly Lys Trp Val Glu Ala Asp Pro His Leu Arg Leu Ile Arg			
260	265	270	
Glu Val Cys Arg Ser His Val Arg Ile Ala Glu Ala Ala Thr Leu Lys			
275	280	285	
Pro Pro Pro Phe Leu Arg Gly Arg Tyr Arg Leu Val Arg Phe Glu Asp			
290	295	300	
Leu Ala Arg Glu Pro Leu Ala Glu Ile Arg Ala Leu Tyr Ala Phe Thr			
305	310	315	320
Gly Leu Thr Leu Thr Pro Gln Leu Glu Ala Trp Ile His Asn Ile Thr			
325	330	335	
His Gly Ser Gly Ile Gly Lys Pro Ile Glu Ala Phe His Thr Ser Ser			
340	345	350	
Arg Asn Ala Arg Asn Val Ser Gln Ala Trp Arg His Ala Leu Pro Phe			
355	360	365	
Thr Lys Ile Leu Arg Val Gln Glu Val Cys Ala Gly Ala Leu Gln Leu			
370	375	380	
Leu Gly Tyr Arg Pro Val Tyr Ser Ala Asp Gln Gln Arg Asp Leu Thr			
385	390	395	400
Leu Asp Leu Val Leu Pro Arg Gly Pro Asp His Phe Ser Trp Ala Ser			
405	410	415	
Pro Asp			

<210> 3423

<211> 1851

<212> DNA

<213> Homo sapiens

<400> 3423

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1440
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 1851

<210> 3424
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 3424
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 Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu
 35 40 45
 Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His
 50 55 60
 Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu
 65 70 75 80
 Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro
 85 90 95
 Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro
 100 105 110
 Asp Arg Pro Gly Cys Glu Met Cys Ser Thr Gln Arg Pro Cys Thr Trp
 115 120 125
 Asp Pro Leu Ala Ala Ser Thr
 130 135

<210> 3425
 <211> 1416
 <212> DNA
 <213> Homo sapiens

<400> 3425
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 120
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 180
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 240
 gacggcacgt gtgacgagtg cgagccgac gaggctccgg gggccgagga agtgtgccga
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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

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Ala	Pro	Gly	Pro	Ala	Ser	Arg	Arg	Gly	Ala	Val	Gln	Ala	Gly	Gly	Asp
					20				25				30		
Ser	Leu	Gly	Arg	Asp	Pro	Gly	Arg	Glu	Glu	Glu	Val	Arg	Pro	Arg	Gly
					35			40				45			
Arg	Lys	Ala	Ala	Ser	Pro	Gly	Ala	Pro	Arg	Pro	Trp	Pro	Arg	His	Ser
					50			55			60				
Thr	His	Met	Ala	Ser	Gly	Val	Ala	Ala	Phe	Glu	Glu	Leu	Pro	His	

65	70	75	80
Asp	Gly	Thr	Cys
Asp	Glu	Cys	Glu
Asp	Glu	Cys	Glu
Pro	Asp	Glu	Ala
Pro	Glu	Ala	Glu
85	90	95	
Glu	Val	Cys	Arg
Glu	Cys	Gly	Phe
Cys	Tyr	Cys	Arg
Arg	Arg	His	Ala
100	105	110	
Ala	His	Arg	Gln
Lys	Phe	Leu	Ser
His	His	Leu	Ala
Glu	Tyr	Val	His
115	120	125	
Gly	Ser	Gln	Ala
Trp	Thr	Pro	Pro
Ala	Asp	Gly	Glu
Gly	Gly	Ala	Gly
Lys	130	135	140
Glu	Glu	Ala	Glu
145	150	155	160
Ala	Gly	Glu	Ser
Glu	Ser	Glu	Glu
Glu	Ser	Glu	Glu
Glu	165	170	175
Ser	Glu	Thr	Glu
Glu	Glu	Glu	Ser
Glu	Asp	Glu	Asp
180	185	190	
Glu	Asp	Ser	Glu
Glu	Glu	Glu	Met
Glu	Asp	Glu	Gln
Glu	Ser	Glu	Glu
Glu	195	200	205
Glu	Asp	Asn	Gln
Glu	Glu	Glu	Gly
Glu	Ser	Glu	Gly
Glu	195	200	205
Ala	Glu	Arg	Val
210	215	220	
Ala	Glu	Ser	Glu
Phe	Asp	Pro	Glu
Ile	Glu	Met	Glu
225	230	235	240
Ala	Lys	Arg	Cys
245	250	255	
Gln	Glu	Asp	Arg
Gln	Leu	Ile	Cys
260	265	270	
His	Gln	Gly	His
Gln	Leu	Leu	Ser
275	280	285	
Arg	Ser	Lys	Asp
Ser	Gly	Gly	Leu
290	295	300	
Glu	Arg	Leu	Lys
Phe	Lys	Ser	Ser
305	310	315	320
Met	Lys	Met	Phe
Ile	Gln	Gln	Glu
325	330	335	
Ala	Asp	Glu	Gln
Gln	Lys	Ala	Leu
340	345	350	
Met	Ala	Thr	Ala
His	Val	Thr	Glu
355	360	365	
Met	Asp	Arg	Leu
370	375	380	
Thr	Ser	Asn	Glu
385	390	395	400
Pro	Ser	Gly	Ala
405	410		

<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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120

gggctggat tgagacttgg accttctgag cactggcaga tgtactggct tctttcagg
 180
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 240
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 300
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 360
 360
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 420
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 480
 ccctgaagcc ccatggtcca gttccaaattc ctgaaggcctt ctactgcttg cagggcctgg
 540
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 580

<210> 3428
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 3428
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 Glu Asn Lys Pro Arg Pro Ser Leu Tyr Ser Leu Gln Asn Phe Glu Glu
 20 25 30
 Met Glu Thr Glu Asp Cys Glu Lys Met Ser Asn Met Gly Thr Leu Asn
 35 40 45
 Ser Ser Met Leu His Arg Ser Ala Glu Ser Leu Lys Ser Leu Ser Ser
 50 55 60
 Glu Leu Cys Pro Glu Lys Ile Leu Pro Glu Glu Lys Pro Val His Leu
 65 70 75 80
 Pro Val Leu Arg Arg Ser Lys Ser Gln Ser Arg Pro Gln Gln Val Lys
 85 90 95
 Phe Ser Asp Asp Val Ile Asp Asn Gly Asn Tyr Asp Ile Glu Ile Arg
 100 105 110
 Gln Pro Pro Met Ser Glu Arg Thr Arg Arg Arg Val Tyr Asn Phe Glu
 115 120 125
 Glu Arg Gly Ser
 130

<210> 3429
 <211> 634
 <212> DNA
 <213> Homo sapiens

<400> 3429
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 120
 gtcagcttcc tttcataact ttcccgccgt tctctccacg agcaggtgca ccagggacct
 180

gtccctctgt cctacacggt caccacagtg acgacccaag gttccccctt gcctacaggc
 240
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 300
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 ctgcctgtgc cctatcaggc ctacccac ctcatctcca gtgaccacta catcctgcac
 420
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 480
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 634

<210> 3430
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3430
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 Tyr Thr Val Thr Thr Val Thr Gln Gly Phe Pro Leu Pro Thr Gly
 35 40 45
 Gln His Ile Pro Gly Cys Ser Ala Gln Gln Leu Pro Ala Cys Ser Val
 50 55 60
 Met Phe Ser Gly Gln His Tyr Pro Leu Cys Cys Leu Pro Pro Pro Leu
 65 70 75 80
 Ile Gln Ala Cys Thr Met Gln Gln Leu Pro Val Pro Tyr Gln Ala Tyr
 85 90 95
 Pro His Leu Ile Ser Ser Asp His Tyr Ile Leu His Pro Pro Pro Pro
 100 105 110
 Gly Thr His Pro Ala Ala Pro Gly Ser Val
 115 120

<210> 3431
 <211> 1396
 <212> DNA
 <213> Homo sapiens

<400> 3431
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 120
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 180
 agcgccgcca gccgtgtcgc caacagtacc aaatcgctgt gcagcggctt cgccccgccc
 240

gacttcaacc attgcctcaa ggattggac tataatggcc ttccctgtgct caccaccaac
 300
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 360
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 420
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 1020
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 1200
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 1260
 gatctgaacg aggctgccat caccacttc tctgtccctg ggctcttctc ctcccaagct
 1320
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 1380
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 1396

<210> 3432
 <211> 296
 <212> PRT
 <213> Homo sapiens

<400> 3432
 Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu
 1 5 10 15
 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu
 20 25 30
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
85	90	95
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		
100	105	110
Gly Gln Met Leu Gly Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		
115	120	125
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		
130	135	140
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		
145	150	155
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
165	170	175
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		
180	185	190
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		
195	200	205
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		
210	215	220
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		
225	230	235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		
245	250	255
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		
260	265	270
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		
275	280	285
Arg Gly Arg Gly Leu Gly Leu Ile		
290	295	

<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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120
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180
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240
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360
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420
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480

agctgcggtg agcacgtgcc caggagaggg ggttccatg gtcggcgtgt ggggtacacc
 540
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 600
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 720
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 780
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 840
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 900
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 960
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 1020
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 1080
 ccaccacccc acctacacca tcaccatc tacgcccattg ccaaattctac acagacgacc
 1140
 tcactccat ccacgccttc acacgcacac ccgtccacac caccatctcc cccgtgtccg
 1200
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 1257

<210> 3434
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 3434
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 Gly Arg Gln Arg Pro Gln Arg Pro Ser His Ser Arg Ser His Thr Arg
 35 40 45
 Ser Asn Leu Lys Arg Asp Val Ala His Leu Tyr Arg Gly Val Gly Ser
 50 55 60
 Arg Tyr Ile Met Gly Ser Gly Glu Ser Phe Met Gln Leu Gln Gln Arg
 65 70 75 80
 Leu Leu Arg Glu Lys Glu Ala Lys Ile Arg Lys Ala Leu Asp Arg Leu
 85 90 95
 Arg Lys Lys Arg His Leu Leu Arg Arg Gln Arg Thr Arg Arg Glu Phe
 100 105 110
 Pro Val Ile Ser Val Val Gly Tyr Thr Asn Cys Gly Glu His Ala Pro
 115 120 125
 Arg Gly Gly Ala Phe Arg Gly Leu Arg Val Thr Gly Glu Asp Ser Pro
 130 135 140
 Gly Gly Gly Gln Gly Val Pro Val Val Ser Val Val Pro Tyr Asp Ser
 145 150 155 160
 Cys Gly Glu His Val Pro Arg Arg Gly Gly Ser His Gly Arg Arg Val

	165	170	175												
Gly	Tyr	Thr	Ser	Cys	Cys	Glu	Ser	Ser	Pro	Arg	Arg	Arg	Val	Ser	Cys
				180				185					190		
Gly	Leu	Cys	Val	Gly	Tyr	Ser	Ser	Gln	Gly	Glu	Asp	Val	Ile	Tyr	Pro
				195				200				205			
Ile	Leu	Pro	Ser	Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro
				210				215			220				
Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu
				225				230			235			240	
Tyr	His	His	Pro	Val	Tyr	Thr	Ile	His	Pro	Ser	Thr	Pro	Ser	Pro	Leu
				245				250			255				
Leu	Cys	Leu	Tyr	His	Pro	Pro	Val	Tyr	Thr	Ser	Thr	Thr	Thr	Pro	Ser
				260				265			270				
Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser
				275				280			285				
Pro	Ser	Ser	Ala	Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser
				290				295			300				
Tyr	Thr	Thr	Thr	Pro	Ser	Thr									
	305			310											

<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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 120 gacagcaatg ccgataccta ctgggagagc gatgggtccc agtgccaaca ctgggtacgg
 180 cttactatga agaagggcac cattgtcaag aagctgctac tcgcagtgaa taccacagat
 240 gacaacttta tgccaaagcg ggtgggtggtc tatgggggtg aaggggacaa cctgaagaag
 300 ctgagtgacg tgagcattga cnngagaccc tcatcggnn atgtctgtgt cctggaggac
 360 atgaccgtcc acctccccat catcgagatc cgcatcggtt agtgccgaga tggatggatt
 420 gatgttcgtc tccgagggtt caagatcaag tcatcttagac agcgggaact agggttgaat
 480 gcagacctgt tccagccaac tagtctggtg cgatatccac gcctagaagg caccgaccct
 540 gaagtaactgt accgcagagc tgtcctcctg cagagattca tcaagatcct cgatagtgtc
 600 ctgcaccacc tggtaacctgc ctgggaccac acactggca ctttcagtga gattaagcaa
 660 gtgaagcagt tcctactgtc gtcccgccag cggccaggcc tggtggctca gtgcctgcgt
 720 gactctgaga gcagcaagcc cagcttcatg ccacgcctat acatcaaccg cctgtttgcc
 780 atggAACACCC gtgcctgccc ctctcgagac cctgcctgca agaatgcagt cttcacccag
 840

gtatatgaag gcctcaagcc ctctgacaaa tatgaaaagc ccctggacta caggtggccc
 900
 atgcgcatacg accagtggtg ggagtgtaaa tttattgcag aaggcatcat tgaccaaggg
 950
 ggtggtttcc gggacagcct ggcagatatg tcagaagagc tgtgccctag ctcagcggat
 1020
 acccccgtgc ccotgccctt ctttgtacgc acagccaacc agggcaatgg cactggtag
 1080
 gctcgggaca tgtatgtacc caaccctcc tgccgagact ttgccaagta tgaatggatc
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 1200
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 1225

<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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Ser	Val	Lys	Gln	Tyr	Val	Glu	Ser	Ile	Asp	Val	Ser	Ser	Tyr	Thr	Glu
								20		25			30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
								35	40		45				
Glu	Ser	Asp	Gly	Ser	Gln	Cys	Gln	His	Trp	Val	Arg	Leu	Thr	Met	Lys
								50	55		60				
Lys	Gly	Thr	Ile	Val	Lys	Lys	Leu	Leu	Leu	Ala	Val	Asp	Thr	Thr	Asp
								65	70	75		80			
Asp	Asn	Phe	Met	Pro	Lys	Arg	Val	Val	Val	Tyr	Gly	Gly	Glu	Gly	Asp
								85	90		95				
Asn	Leu	Lys	Leu	Ser	Asp	Val	Ser	Ile	Asp	Xaa	Arg	Pro	Ser	Ser	
								100	105		110				
Gly	Xaa	Val	Cys	Val	Leu	Glu	Asp	Met	Thr	Val	His	Leu	Pro	Ile	Ile
								115	120		125				
Glu	Ile	Arg	Ile	Val	Glu	Cys	Arg	Asp	Asp	Gly	Ile	Asp	Val	Arg	Leu
								130	135		140				
Arg	Gly	Val	Lys	Ile	Lys	Ser	Ser	Arg	Gln	Arg	Glu	Leu	Gly	Leu	Asn
								145	150		155		160		
Ala	Asp	Leu	Phe	Gln	Pro	Thr	Ser	Leu	Val	Arg	Tyr	Pro	Arg	Leu	Glu
								165	170		175				
Gly	Thr	Asp	Pro	Glu	Val	Leu	Tyr	Arg	Arg	Ala	Val	Leu	Gln	Arg	
								180	185		190				
Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
								195	200		205				
Asp	His	Thr	Leu	Gly	Thr	Phe	Ser	Glu	Ile	Lys	Gln	Val	Lys	Gln	Phe
								210	215		220				
Leu	Leu	Leu	Ser	Arg	Gln	Arg	Pro	Gly	Leu	Val	Ala	Gln	Cys	Leu	Arg
								225	230		235		240		
Asp	Ser	Glu	Ser	Ser	Lys	Pro	Ser	Phe	Met	Pro	Arg	Leu	Tyr	Ile	Asn
								245	250		255				
Arg	Arg	Leu	Ala	Met	Glu	His	Arg	Ala	Cys	Pro	Ser	Arg	Asp	Pro	Ala

260	265	270
Cys Lys Asn Ala Val Phe Thr Gln Val Tyr Glu Gly Leu Lys Pro Ser		
275	280	285
Asp Lys Tyr Glu Lys Pro Leu Asp Tyr Arg Trp Pro Met Arg Tyr Asp		
290	295	300
Gln Trp Trp Glu Cys Lys Phe Ile Ala Glu Gly Ile Ile Asp Gln Gly		
305	310	315
Gly Gly Phe Arg Asp Ser Leu Ala Asp Met Ser Glu Glu Leu Cys Pro		
325	330	335
Ser Ser Ala Asp Thr Pro Val Pro Leu Pro Phe Phe Val Arg Thr Ala		
340	345	350
Asn Gln Gly Asn Gly Thr Gly Glu Ala Arg Asp Met Tyr Val Pro Asn		
355	360	365
Pro Ser Cys Arg Asp Phe Ala Lys Tyr Glu Trp Ile Gly Gln Leu Met		
370	375	380
Gly Ala Ala Leu Arg Gly Lys Glu Phe Leu Val Leu Ala Leu Pro Gly		
385	390	395
Phe Val Trp Lys Gln Leu Ser Ala		
405		

<210> 3437

<211> 2081

<212> DNA

<213> Homo sapiens

<400> 3437

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 120
 cacctgctgc accatcgaca aggccaccca gacgcccctg tcctggcaag agctagaagg
 180
 tgagcgtgcc agttcctgtg cacacaagcg ctcagcatcc tggggcagca cagaccaccg
 240
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 300
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 360
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 420
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 480
 ggagctgctg aggatcccttg atatccctga tggcaccgg gccccagctc ctccccagag
 540
 tggcagctgt gatcatcccc tcctcctcct gagcctggca accttgccag ctctccttcc
 600
 atgtccttgg catctccccca gcctgtggcc tggccagtca tgaggaacat cggggtgtccg
 660
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 720
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 780
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 840

ccancgtctc caggtcctga cctggcccttc ctgacttcct gtccctgacaa gaacaaaagtc
 900
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 1380
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 1440
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 1500
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 1560
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 1680
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 1860
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 1920
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 1980
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 2040
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 2081

<210> 3438
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 3438
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 Arg Pro Pro Lys Arg Asp Phe Gln Val Glu Ala Thr Thr Ala Glu Asp
 20 25 30
 Glu Ala Glu Pro Gln Trp Glu Arg Glu Gly Ala Arg Phe Thr Thr Pro

35	40	45													
Arg	Gly	Pro	Arg	Ser	Ala	Gly	Ser	Thr	Glu	Gly	Val	Pro	Ser	Gln	Leu
50						55			60						
Pro	Leu	Arg	Val	Pro	Cys	Leu	Ala	Thr	Gln	Pro	Leu	Pro	Ala	Gln	Glu
65						70			75						80
Pro	Gly	Arg	Ala	Gln	Pro	Arg	Ala	Gly	Gly	Ile	Cys	Glu	Gly	Ala	
						85			90						95
Gly	Arg	Arg	Gly	Ala	Ala	Glu	Asp	Pro							
						100			105						

<210> 3439

<211> 1519

<212> DNA

<213> Homo sapiens

<400> 3439

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120
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180
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720
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1140

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 1320
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 1380
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 1519

<210> 3440
 <211> 287
 <212> PRT
 <213> Homo sapiens

<400> 3440
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 35 40 45
 Thr Ser Pro Met Pro Pro Ala Ala Leu Arg Pro Pro Ala Gly Pro
 50 55 60
 Arg Arg Pro Arg Xaa Pro Gly Gly Pro Gln His His Gln Pro Gln Pro
 65 70 75 80
 Pro Leu Trp Thr Pro Thr Pro Pro Ser Pro Ala Ser Asp Trp Pro Pro
 85 90 95
 Leu Pro Pro Asn Arg Pro Pro Gln Asn Pro Gly Pro Thr Leu Pro Trp
 100 105 110
 Arg Gln Arg Asp Lys Gly Gly Pro Ser Pro Leu Pro Glu Ala Arg Thr
 115 120 125
 Pro Trp Gly Gly Gly Glu Asp Val Ser Ala Gly Pro Leu Xaa Thr Pro
 130 135 140
 Phe Leu Ser Ala Pro Leu Val Pro Arg Ser Pro Gly Gly Glu Ser Ala
 145 150 155 160
 Asp Ser Ser Gln Ala Gly Thr Arg Leu Val Pro Glu His Ala Ala Ala
 165 170 175
 His Thr Gln Gly His Gly Pro Ser Gly Pro Gly Thr Trp Ser Gly Ser
 180 185 190
 Glu Arg Pro Gly Cys Leu Ala Asp Arg Thr Ser Glu Thr Thr Gln Pro
 195 200 205
 Ser Phe Glu Asp Ala Pro Ala Gln Pro Ser Pro Gly Val Pro Trp Arg
 210 215 220
 Thr Thr Leu Ala Glu Thr Leu Leu Ile Pro Gly Leu Glu Leu Leu Gly
 225 230 235 240
 Gly Arg Gln Ala Ser Thr Pro Thr Leu Gly Asn Ala Glu Pro Leu Arg
 245 250 255
 Met Cys Ala Arg Gly Arg Val Cys Val Phe Leu Arg Val Ser Leu Phe

260	265	270
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275	280	285

<210> 3441
<211> 2074
<212> DNA
<213> Homo sapiens

<400> 3441
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120
ctcttcgggg acgaggtttc cccactcctg aagcagtaca tcctggagaa ggagagcgct
180
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240
cgccagggcg aggtggtgca gcggctgacg cggatggtgg ggaagaacgt gaagctgtac
300
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360
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420
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480
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720
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780
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960
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1080
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1200
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1260
gcagtgaaagg agctttactc ccagctcgcc gagaagctgg aacagctgga tcaccggaag
1320

cccagccccg cacaggctgc ggagacgccc gcccctggagc tgccccctccc cagcgtgccc
 1380
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 1440
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 <212> PRT
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<400> 3442
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 Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
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 Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
 65 70 75 80
 Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
 85 90 95
 Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
 100 105 110
 Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
 115 120 125
 Ser Pro Asp Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
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 Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
 145 150 155 160
 Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

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Asp Asp Tyr Thr Phe Asn Val Asp Gln Lys Leu Pro Ala Glu Glu Lys			
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Ala Pro Val Ser Tyr Pro Asn Thr Leu Pro Glu Ser Phe Thr Lys Phe			
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Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly Leu Tyr Tyr Val Leu			
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His Ile Thr Lys Gln Arg Asn Lys Asn Ala Leu Leu Arg Leu Leu Pro			
225	230	235	240
Gly Leu Val Glu Thr Phe Gly Asp Leu Ala Phe Gly Asp Ile Phe Leu			
245	250	255	
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260	265	270	
Glu Asp Phe Cys Ser Ser Leu Phe Asp Gly Phe Phe Leu Thr Ala Ser			
275	280	285	
Pro Arg Lys Glu Asn Val His Arg His Ala Leu Arg Leu Leu Ile His			
290	295	300	
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305	310	315	320
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325	330	335	
Gln Leu Gly Glu Lys Leu Glu Gln Leu Asp His Arg Lys Pro Ser Pro			
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<210> 3444
<211> 579
<212> PRT

<213> Homo sapiens

<400> 3444

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Ser	Glu	Asn	Val	Glu	Lys	Ser	Lys	Ala	Tyr	Lys	Leu	Asn	Pro	Lys	Phe
					35				40					45	
Cys	Ser	Leu	Ser	Phe	Gln	Ala	Thr	Lys	Cys	Lys	Leu	Ala	Gly	Leu	Glu
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Val	Leu	Ser	Asp	Asp	Pro	Asp	Leu	Val	Lys	Val	Val	Glu	Ser	Leu	Thr
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Cys	Gly	Lys	Ile	Phe	Ala	Val	Glu	Ile	Leu	Asp	Lys	Ala	Asp	Ile	Pro
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Leu	Val	Val	Leu	Tyr	Asp	Thr	Ser	Gly	Glu	Asp	Asp	Ile	Asn	Ile	Asn
					100				105					110	
Ala	Thr	Cys	Leu	Lys	Ala	Ile	Cys	Asp	Lys	Ser	Leu	Glu	Val	His	Leu
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Asp	Gly	Thr	Leu	Tyr	Cys	Gln	Val	Pro	Cys	Lys	Gly	Leu	Asn	Lys	Leu
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Thr	Ser	Glu	Cys	Phe	Val	Ser	Leu	Pro	Phe	Cys	Gly	Lys	Ile	Cys	Leu
					180				185					190	
Phe	His	Cys	Lys	Gly	Lys	Trp	Leu	Arg	Val	Glu	Ile	Thr	Asn	Val	His
					195				200					205	
Ser	Ser	Arg	Ala	Leu	Asp	Val	Gln	Phe	Leu	Asp	Ser	Gly	Thr	Val	Thr
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Ser	Val	Lys	Val	Ser	Glu	Leu	Arg	Glu	Ile	Pro	Pro	Arg	Phe	Leu	Gln
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					260				265					270	
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Val	Asp	Glu	Thr	Arg	Gly	Ile	Ala	His	Val	Tyr	Leu	Phe	Thr	Pro	Lys
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					325				330					335	
Gly	Ala	Asp	Ser	Pro	Asn	Ser	Lys	Asn	Gly	Asn	Met	Pro	Met	Ser	Gly
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					355				360					365	
Ser	Met	Val	Asp	His	Thr	Ser	Ala	Phe	Ser	Thr	Glu	Glu	Leu	Pro	Pro
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Pro	Val	His	Leu	Ser	Lys	Pro	Gly	Glu	His	Met	Asp	Val	Tyr	Val	Pro
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Val	Ala	Cys	His	Pro	Gly	Tyr	Phe	Val	Ile	Gln	Pro	Trp	Gln	Glu	Ile

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Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala		
435	440	445
Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr		
450	455	460
Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu		
465	470	475
Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu		
485	490	495
Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln		
500	505	510
Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys		
515	520	525
Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp		
530	535	540
Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr		
545	550	555
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<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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<210> 3446
<211> 169
<212> PRT
<213> Homo sapiens

<400> 3446
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Met	Asp	Asp	Glu	Phe	Gln	Leu	Leu	Gln	Arg	Asn	Phe	Met	Asp	Lys	Tyr
							35		40						45
Tyr	Leu	Glu	Phe	Glu	Asp	Thr	Glu	Glu	Asn	Lys	Leu	Ile	Tyr	Thr	Pro
							50		55						60
Ile	Phe	Asn	Glu	Tyr	Ile	Ser	Leu	Val	Glu	Lys	Tyr	Ile	Glu	Gln	
							65		70						80
Leu	Leu	Gln	Arg	Ile	Pro	Glu	Phe	Asn	Met	Ala	Ala	Phe	Thr	Thr	Thr
							85		90						95
Leu	His	His	Leu	Phe	Arg	Leu	Arg	His	His	Lys	Asp	Glu	Val	Ala	Gly
							100		105						110
Asp	Ile	Phe	Asp	Met	Leu	Leu	Thr	Phe	Thr	Asp	Phe	Leu	Ala	Phe	Lys
							115		120						125
Glu	Met	Phe	Leu	Asp	Tyr	Arg	Ala	Glu	Lys	Glu	Gly	Arg	Gly	Leu	Asp
							130		135						140
Leu	Ser	Ser	Gly	Leu	Val	Val	Thr	Ser	Leu	Cys	Lys	Ser	Ser	Ser	Leu
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<210> 3447
<211> 936
<212> DNA
<213> Homo sapiens

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780

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 gaagactaga ggtgattctg cccagcatcc catatt
 936

<210> 3448
 <211> 302
 <212> PRT
 <213> Homo sapiens

<400> 3448
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 35 40 45
 Ala Arg Arg Leu Trp Glu Ala Val Ser Gly Ala Gln Pro Val Gly Arg
 50 55 60
 Glu Glu Val Glu His Met Ile Gln Lys Asn Gln Cys Leu Phe Thr Asn
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 Thr Gln Cys Lys Val Cys Cys Ala Leu Leu Ile Ser Glu Ser Gln Lys
 85 90 95
 Leu Ala His Tyr Gln Ser Lys Lys His Ala Asn Lys Val Lys Arg Tyr
 100 105 110
 Leu Ala Ile His Gly Met Glu Thr Leu Lys Gly Glu Thr Lys Lys Leu
 115 120 125
 Asp Ser Asp Gln Lys Ser Ser Arg Ser Lys Asp Lys Asn Gln Cys Cys
 130 135 140
 Pro Ile Cys Asn Met Thr Phe Ser Ser Pro Val Val Ala Gln Ser His
 145 150 155 160
 Tyr Leu Gly Lys Thr His Ala Lys Asn Leu Lys Leu Lys Gln Gln Ser
 165 170 175
 Thr Lys Val Glu Ala Leu His Gln Asn Arg Glu Met Ile Asp Pro Asp
 180 185 190
 Lys Phe Cys Ser Leu Cys His Ala Thr Phe Asn Asp Pro Val Met Ala
 195 200 205
 Gln Gln His Tyr Val Gly Lys His Arg Lys Gln Glu Thr Lys Leu
 210 215 220
 Lys Leu Met Ala Arg Tyr Gly Arg Leu Ala Asp Pro Ala Val Thr Asp
 225 230 235 240
 Phe Pro Ala Gly Lys Gly Tyr Pro Cys Lys Thr Cys Lys Ile Val Leu
 245 250 255
 Asn Ser Ile Glu Gln Tyr Gln Ala His Val Ser Gly Phe Lys His Lys
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<210> 3449
 <211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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 180
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 780
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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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								20							30
Ser	Val	Thr	Ala	Asn	Ser	Gln	Ser	Pro	Ala	Leu	Leu	Ala	Gly	Thr	Asn
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Pro	Val	Ala	Val	Ala	Asp	Gly	Gly	Ser	Cys	Pro	Ala	His	Tyr	Pro	
								50							60
Val	His	Glu	Cys	Val	Phe	Lys	Gly	Asp	Val	Arg	Arg	Leu	Ser	Ser	Leu
								65							80
Ile	Arg	Thr	His	Asn	Ile	Gly	Gln	Lys	Asp	Asn	His	Gly	Asn	Thr	Pro
								85							95
Leu	His	Leu	Ala	Val	Met	Leu	Gly	Asn	Lys	Glu	Cys	Ala	His	Leu	Leu

	100	105	110												
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Arg	Pro	Arg	Leu	Leu	Lys	Ala	Leu	Lys	Glu	Leu	Gly	Asp	Phe	Tyr	Leu
	165				170							175			
Glu	Leu	His	Trp	Asp	Phe	Gln	Ser	Trp	Val	Pro	Leu	Leu	Ser	Arg	Ile
	180				185							190			
Leu	Pro	Ser	Asp	Ala	Cys	Lys	Ile	Tyr	Lys	Gln	Gly	Ile	Asn	Ile	Arg
	195				200						205				
Leu	Asp	Thr	Thr	Leu	Ile	Asp	Phe	Thr	Asp	Met	Lys	Cys	Gln	Arg	Gly
	210				215						220				
Asp	Leu	Ser	Phe	Ile	Phe	Asn	Gly	Asp	Ala	Ala	Pro	Ser	Glu	Ser	Phe
	225				230						235				240
Val	Val	Leu	Asp	Asn	Glu	Gln	Lys	Val	Tyr	Gln	Arg	Ile	His	His	Glu
	245							250			255				
Ala	His	Ile	Pro	Gly	Ile	Arg	Asp	Gly	Asn	Arg	Arg	Arg	Gly	Gly	Tyr
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Phe	Asn	Glu	Gln												
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<210> 3451

<211> 595

<212> DNA

<213> Homo sapiens

<400> 3451

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<210> 3452

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3452

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Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
 35          40          45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
 50          55          60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
 65          70          75          80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
 85          90          95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
100         105         110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
115         120         125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
130         135         140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145         150         155         160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
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Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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		20						25				30			
Pro	Val	Ala	Gln	Gly	Leu	Lys	Glu	Ala	Leu	Val	Asp	Thr	Leu	Thr	Gly
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Ile	Leu	Ser	Pro	Val	Gln	Glu	Val	Arg	Ala	Ala	Glu	Glu	Gln	Ile	
								50		55		60			
Lys	Val	Leu	Glu	Val	Thr	Glu	Glu	Phe	Gly	Val	His	Leu	Ala	Glu	Leu
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Thr	Val	Asp	Pro	Gln	Gly	Ala	Leu	Ala	Ile	Arg	Gln	Leu	Ala	Ser	Val
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Ile	Leu	Lys	Gln	Tyr	Val	Glu	Thr	His	Trp	Cys	Ala	Gln	Ser	Glu	Lys
								100		105					110
Phe	Arg	Pro	Pro	Glu	Thr	Thr	Glu	Arg	Ala	Lys	Ile	Val	Ile	Arg	Glu
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Leu	Leu	Pro	Asn	Gly	Leu	Arg	Glu	Ser	Ile	Ser	Lys	Val	Arg	Ser	Ser
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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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660					
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<210> 3456
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 3456
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 35 40 45
 Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Met
 50 55 60
 Tyr Phe Glu Leu Pro Asp Ser Phe Gln His Tyr Arg Ser Val Phe Tyr
 65 70 75 80
 Ser Phe Glu Glu His Ile Ser Phe Ala Leu Tyr Val Asp Asn Arg
 85 90 95
 Phe Phe Thr Leu Thr Val Thr Ser Leu His Leu Val Phe Gln Met Gly
 100 105 110
 Val Ile Phe Pro Gln

115

<210> 3457

<211> 646

<212> DNA

<213> Homo sapiens

<400> 3457

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<210> 3458

<211> 61

<212> PRT

<213> Homo sapiens

<400> 3458

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Arg	Cys	Val	Xaa	Val	Pro	Gly	Cys	Val	Cys	Ala	Cys	Val	Cys	Val	Asp
									20					25	30
Ile	Cys	Ala	Cys	Leu	Phe	Thr	His	Arg	Trp	Glu	Cys	Arg	Val	Cys	Ile
									35					40	45
Leu	Cys	Xaa	Cys	Thr	Cys	Thr	Gln	Ala	Xaa	Ala	Gly	Lys			
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<210> 3459

<211> 592

<212> DNA

<213> Homo sapiens

<400> 3459

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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

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Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
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His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
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Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
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Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
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Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
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<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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 agctttgcgt ccgtggcaga tgtcagctcc agtgcagcc gcaccttccg gatggccctg
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ctggaagcca gcacggggatg ggctggatc ctggcaagcc tcctcgaaaa ccactggctc
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 360
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<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Trp Leu Ala Leu Ala Leu Ile Ala Met Thr Leu Tyr Ala Ala Phe			
35	40	45	
Cys Phe Gly Glu Thr Leu Lys Glu Pro Lys Ser Thr Arg Leu Phe Thr			
50	55	60	
Phe Arg His His Arg Ser Ile Val Gln Leu Tyr Val Ala Pro Ala Pro			
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Glu Lys Ser Arg Lys His Leu Ala Leu Tyr Ser Leu Ala Ile Phe Val			
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Val Ile Thr Val His			
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<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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<210> 3464
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 <213> Homo sapiens

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Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met		
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Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly		
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Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu		
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Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu		
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<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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<210> 3466
<211> 315
<212> PRT
<213> Homo sapiens

<400> 3466

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 Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ile Lys Arg
 65 70 75 80
 Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
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 Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
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 115 120 125
 Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
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 Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
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 Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
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 Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
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 Ser Gln Glu Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
 195 200 205
 Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
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 Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
 225 230 235 240
 Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
 245 250 255
 Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
 260 265 270
 Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
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<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

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 Gln Ser Cys Gly Tyr Thr Ser Val Ser Gln Asp Phe Leu Cys Gln Arg
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<212> DNA

<213> Homo sapiens

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<210> 3470
<211> 322
<212> PRT
<213> Homo sapiens

<400> 3470
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Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala			
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Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys			
65	70	75	80
Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val			
85	90	95	
Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe			
100	105	110	
Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu			
115	120	125	
Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu			
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Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly			
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Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln			
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Ala Glu Leu Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu			
195	200	205	
Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln			
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Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr			
225	230	235	240
Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile			
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Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met			
275	280	285	
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile			
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<210> 3471

<211> 2335

<212> DNA

<213> Homo sapiens

<400> 3471

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<211> 631
<212> PRT
<213> Homo sapiens

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Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn Arg Lys
 50 55 60
Asp Lys Phe Pro Ala Ile Thr His Leu Lys Phe Leu Ala Arg Asp Met
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Ser Glu Gln Val Leu Leu Cys Ala Ser Ser Gln Thr Ser Ser Ile Val
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Glu Cys Trp Ser Leu Arg Lys Glu Gly Leu Pro Val Asn Asn Ile Phe
 100 105 110
Gln Gln Ile Ser Pro Val Val Gly Asp Lys Gln Pro Thr Ile Leu Lys
 115 120 125
Trp Arg Ile Leu Ser Ala Thr Asn Asp Leu Asp Arg Val Ser Ala Val
 130 135 140
Ala Leu Pro Lys Leu Pro Ile Ser Leu Thr Asn Thr Asp Leu Lys Val
 145 150 155 160
Ala Ser Asp Thr Gln Phe Tyr Pro Gly Leu Gly Leu Ala Leu Ala Phe
 165 170 175
His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln Thr Met
 180 185 190
Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu Pro Ala
 195 200 205
Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys Ala Met
 210 215 220
Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser His Gly

225	230	235	240
Lys Leu Ser Val	Leu Arg Leu Ser Pro	Ser Met Gly His	Pro Leu Glu
245	250	255	
Val Gly Leu Ala	Leu Arg His Leu Leu Phe	Leu Glu Tyr Cys	Met
260	265	270	
Val Thr Gly Tyr Asp Trp	Trp Asp Ile Leu Leu His	Val Gln Pro Ser	
275	280	285	
Met Val Gln Ser	Leu Val Glu Lys Leu His	Glu Tyr Thr Arg Gln	
290	295	300	
Thr Ala Ala Leu	Gln Val Leu Ser Thr Arg	Ile Leu Ala Met Lys	
305	310	315	320
Ala Ser Leu Cys	Lys Leu Ser Pro Cys	Thr Val Thr Arg Val	Cys Asp
325	330	335	
Tyr His Thr Lys	Leu Phe Leu Ile Ala	Ile Ser Ser Thr	Leu Lys Ser
340	345	350	
Leu Leu Arg Pro	His Phe Leu Asn Thr	Pro Asp Lys Ser	Pro Gly Asp
355	360	365	
Arg Leu Thr Glu	Ile Cys Thr Lys Ile	Thr Asp Val Asp	Ile Asp Lys
370	375	380	
Val Met Ile Asn	Leu Lys Thr Glu Glu	Phe Val Leu Asp	Met Asn Thr
385	390	395	400
Leu Gln Ala	Leu Gln Gln Leu Leu Gln	Trp Val Gly Asp	Phe Val Leu
405	410	415	
Tyr Leu Leu Ala	Ser Leu Pro Asn Gln	Gly Ser Leu Leu Arg	Pro Gly
420	425	430	
His Ser Phe	Leu Arg Asp Gly	Thr Ser Leu Gly	Met Leu Arg Glu Leu
435	440	445	
Met Val Val Ile	Arg Ile Trp Gly	Leu Leu Lys Pro	Ser Cys Leu Pro
450	455	460	
Val Tyr Thr Ala	Thr Ser Asp Thr Gln Asp	Ser Met Ser	Leu Leu Phe
465	470	475	480
Arg Leu Leu Thr	Lys Leu Trp Ile Cys	Cys Arg Asp Glu	Gly Pro Ala
485	490	495	
Ser Glu Pro Asp	Glu Ala Leu Val Asp	Glu Cys Cys	Leu Leu Pro Ser
500	505	510	
Gln Leu Leu Ile	Pro Ser Leu Asp Trp	Leu Pro Ala	Ser Asp Gly Leu
515	520	525	
Val Ser Arg	Leu Gln Pro Lys Gln	Pro Leu Arg	Leu Gln Phe Gly Arg
530	535	540	
Ala Pro Thr	Leu Pro Gly Ser	Ala Ala Thr	Leu Gln Leu Asp Gly Leu
545	550	555	560
Ala Arg Ala	Pro Gly Gln Pro Lys	Ile Asp His	Leu Arg Arg Leu His
565	570	575	
Leu Gly Ala	Cys Pro Thr Glu Glu	Cys Lys Ala Cys	Thr Arg Cys Gly
580	585	590	
Cys Val Thr	Met Leu Lys Ser	Pro Asn Arg	Thr Thr Ala Val Lys Gln
595	600	605	
Trp Glu Gln Arg	Trp Ile Lys Asn	Cys Leu Cys	Gly Gly Leu Trp Trp
610	615	620	
Arg Val Pro	Leu Ser Tyr	Pro	
625	630		

<210> 3473

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 3473
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120
gcccattgcc cggccggac tgagtgcgcg cggcgagaa tggcgtacat ccagttggaa
180
ccattaaacg agggtttct ttctagaatc tctggtctgc tgctgtgcag atggacactgc
240
cgccactgct gtcagaagtgc ctacgagtc agctgttgc agtcaagtga ggatgaagtt
300
gaaattctgg gaccttccc tgctcagacc cctccctggc tcatggccag ccggagcagt
360
gacaaggatg gtgactctgt ccacacggcc agcgaagtcc cgctgacccc acggaccaat
420
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480
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540
gagtttggcg ttctcagcgc caagaaggag cccatccaac cttcggtgct cagacggacc
600
tataaccccg acgactatcc caggaagttc gaacccacc tgcactccct cgactccaac
660
agcgacgatg tggactctct gacagacgag gagatcctgt ccaagtacca gctggccatg
720
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780
gccaggacc tgccacctcc catctccac gatggctcgc gccaggacat ggccactcc
840
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900
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960
gaggccaga ggaggaccct gtcctgacc gtggtagatt ttgataagtt ctccggccac
1020
tgtgtcatttggaaagtttc tgtgcctttg tgtgaagttt acctggtaaa gggccggcac
1080
tgggtggaaagg cgctgattcc cagttctcag aatgaagtgg agctggggga gctgcttctg
1140
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1200
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1380
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1440
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1500

cgcacagccg tggagcagtgcatagcctg aggtcccgag ctgagtgtga ccgcgtgtct
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<210> 3474
 <211> 474
 <212> PRT
 <213> Homo sapiens

<400> 3474
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 Ile Ser Gly Leu Leu Leu Cys Arg Trp Thr Cys Arg His Cys Cys Gln
 20 25 30
 Lys Cys Tyr Glu Ser Ser Cys Cys Gln Ser Ser Glu Asp Glu Val Glu
 35 40 45
 Ile Leu Gly Pro Phe Pro Ala Gln Thr Pro Pro Trp Leu Met Ala Ser
 50 55 60
 Arg Ser Ser Asp Lys Asp Gly Asp Ser Val His Thr Ala Ser Glu Val
 65 70 75 80
 Pro Leu Thr Pro Arg Thr Asn Ser Pro Asp Gly Arg Arg Ser Ser Ser
 85 90 95
 Asp Thr Ser Lys Ser Thr Tyr Ser Leu Thr Arg Arg Ile Ser Ser Leu
 100 105 110
 Glu Ser Arg Arg Pro Ser Ser Pro Leu Ile Asp Ile Lys Pro Ile Glu
 115 120 125
 Phe Gly Val Leu Ser Ala Lys Lys Glu Pro Ile Gln Pro Ser Val Leu
 130 135 140
 Arg Arg Thr Tyr Asn Pro Asp Asp Tyr Phe Arg Lys Phe Glu Pro His
 145 150 155 160
 Leu Tyr Ser Leu Asp Ser Asn Ser Asp Asp Val Asp Ser Leu Thr Asp
 165 170 175
 Glu Glu Ile Leu Ser Lys Tyr Gln Leu Gly Met Leu His Phe Ser Thr
 180 185 190
 Gln Tyr Asp Leu Leu His Asn His Leu Thr Val Arg Val Ile Glu Ala
 195 200 205
 Arg Asp Leu Pro Pro Ile Ser His Asp Gly Ser Arg Gln Asp Met
 210 215 220
 Ala His Ser Asn Pro Tyr Val Lys Ile Cys Leu Leu Pro Asp Gln Lys
 225 230 235 240
 Asn Ser Lys Gln Thr Gly Val Lys Arg Lys Thr Gln Lys Pro Val Phe
 245 250 255
 Glu Glu Arg Tyr Thr Phe Glu Ile Pro Phe Leu Glu Ala Gln Arg Arg
 260 265 270
 Thr Leu Leu Leu Thr Val Val Asp Phe Asp Lys Phe Ser Arg His Cys
 275 280 285
 Val Ile Gly Lys Val Ser Val Pro Leu Cys Glu Val Asp Leu Val Lys
 290 295 300
 Gly Gly His Trp Trp Lys Ala Leu Ile Pro Ser Ser Gln Asn Glu Val
 305 310 315 320
 Glu Leu Gly Glu Leu Leu Leu Ser Leu Asn Tyr Leu Pro Ser Ala Gly

325	330	335
Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp		
340	345	350
Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly		
355	360	365
Leu Lys Leu Val Lys Thr Lys Thr Ser Phe Leu Arg Gly Thr Ile		
370	375	380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu		
385	390	395
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys		
405	410	415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser		
420	425	430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg		
435	440	445
Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp		
450	455	460
Arg Val Ser Pro Ala Ser Leu Glu Val Thr		
465	470	

<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

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120
gaggtgctca acacgctggt gcagctggcg gccgacctgg ccatctttgc cctttggggg
180
ctcaagcccg tggctcacct gctggccagc tccttcctgg gcctgggcct gcaccccatc
240
tcgggccact tcgtggccga gcactacatg ttccctcaagg gccacgagac ctactcctac
300
tatgggcctc tcaactggat caccttaat gtgggctacc acgtggagca ccacgacttc
360
cccagcatcc cgggctacaa cctgccgctg gtgcggaaaga tcgcgcccga gtactacgac
420
cacctgccgc agcaccactc ctgggtgaag gtgctctgg attttgtt tgaggactcc
480
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<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

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Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val

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20	25	30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln		
35	40	45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val		
50	55	60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile		
65	70	75
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu		
85	90	95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly		
100	105	110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu		
115	120	125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln		
130	135	140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser		
145	150	155
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr		
165	170	

<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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120
gtggcccttg actttgctgc ccgagagatg gctccaaata tggcagagtg ggaccagaag
180
gtaggcggtt ttcttgtct tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgcctccc gataatgtaa ttgttaaatg tctcctccac ttaccaactc ttactgcaag
300
tgagaataacc ggttagtggat gattttcct agaaggcatc ctgatcatct tgtaca
356

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<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

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Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser			
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Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr			
35	40	45	
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile			
50	55	60	
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe			

65	70	75	80												
Phe	Leu	Leu	Phe	Ile	Lys	Ser	His	Gly	Arg	Val	Asp	Ala	Gly	Gly	Gln
				85		90									95
Ala	Pro	Val	Ala	Gly	Leu	Asp	Glu	Asp	Pro	Glu	Thr	Ala	Gly	Gln	Ala
				100		105									110
Ala	Glu	Ala	Arg												
				115											

<210> 3479

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3479

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 120
 gagtatctca tgtacctcaa caccgcggct gggagaacct gcaatgacta catgcgtac
 180
 ccagtgttcc cctgggtcct cgcatcactac acctcagaga cattgaactt ggcaaattccg
 240
 aagattttcc gggatcttcc aaagccatg gggctcaga ccaaggaaag gaagctgaaa
 300
 ttatccaga gtttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
 360
 tactacaccc actactcctc ggccatcatc gtggcctcct acctggtccg gatgccaccc
 420
 ttcaccagg cttctgcgc tctgcagggt agctgctgcc actctctgtt cacacacaca
 480
 cacacacaca cacacacata cgccctgtatc acaagactaa gacctgtgt tgaacaaaga
 540
 caggatgcct ctgctaaaaa cttagtcatt agccagtgtt cattggctcc
 600
 aggattctgg ctcaccaggcc aaggcaggct gttttcctc agttacacct gcacatctgc
 660
 ccaacaaagt cttgcaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
 720
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 780
 ggccgtcaag gattaga
 797

<210> 3480

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3480

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Asn	Leu	Arg	Arg	Tyr	Pro	Gly	Ser	Asp	Arg	Ile	Met	Leu	Gln	Lys	Trp
				20			25							30	
Gln	Lys	Arg	Asp	Ile	Ser	Asn	Phe	Glu	Tyr	Leu	Met	Tyr	Leu	Asn	Thr

35	40	45
Ala Ala Gly Arg Thr Cys Asn Asp Tyr Met Gln Tyr Pro Val Phe Pro		
50	55	60
Trp Val Leu Ala Asp Tyr Thr Ser Glu Thr Leu Asn Leu Ala Asn Pro		
65	70	75
Lys Ile Phe Arg Asp Leu Ser Lys Pro Met Gly Ala Gln Thr Lys Glu		
85	90	95
Arg Lys Leu Lys Phe Ile Gln Arg Phe Lys Glu Val Glu Lys Thr Glu		
100	105	110
Gly Asp Met Thr Ala Gln Cys His Tyr Tyr Thr His Tyr Ser Ser Ala		
115	120	125
Ile Ile Val Ala Ser Tyr Leu Val Arg Met Pro Pro Phe Thr Gln Ala		
130	135	140
Phe Cys Ala Leu Gln Val Ser Cys Cys His Ser Leu Tyr Thr His Thr		
145	150	155
His Thr His Thr His Thr Tyr Ala Cys Ile Thr Arg Leu Arg Pro Val		
165	170	175
Leu Glu Gln Arg Gln Asp Ala Ser Ala Lys Asn Leu Val Ile Ser Gln		
180	185	190

<210> 3481

<211> 1794

<212> DNA

<213> Homo sapiens

<400> 3481

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120
atgaggtcct gaccagaggg tcttctgccat atgcctccaa gtggtcacca cctcagctct
180
gcagacccctg cggtgctggg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
240
ttcacccctct tcaagaagga gtacggctgt aagaattgtg gcagggngtt ctgttcaggc
300
300
tgcctaagct tcagtgcagc agtgcctcgg actggaaaca cccaaacagaa agtctgcaag
360
360
caatgccatg aggtcctgac cagagggtct tctgccaatg cctccaaatg gtcaccacct
420
420
cagaactata agaagcgtgt ggcagccttg gaagccaaagc aaaagcccag cacttcccag
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720
720
caggacccaa gcccagcaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
780
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840

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 1140
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 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

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															30
Leu	Phe	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys	
															45
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
															60
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
															80
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Arg	
															95
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	
															110
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

115	120	125
Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu		
130	135	140
Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser		
145	150	155
Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu		160
165	170	175
Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp		
180	185	190
Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser		
195	200	205

<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

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120
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300
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477

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<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

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Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu			
35	40	45	
Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu			
50	55	60	
Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val			
65	70	75	80
Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala			
85	90	95	
Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala			

100	105	110
Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His		
115	120	125
Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val		
130	135	140
Pro Thr Arg		
145		
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<211> 812		
<212> DNA		
<213> Homo sapiens		
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120		
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420		
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480		
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540		
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660		
ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcattcacta		
720		
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<210> 3486		
<211> 117		
<212> PRT		
<213> Homo sapiens		
<400> 3486		
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Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys		

35	40	45
Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn	Thr Trp Ser Leu Met	
50	55	60
Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro	Glu Gly Phe Phe	
65	70	75
Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro	Leu Pro Leu Pro Leu	Met
85	90	95
Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His	Leu Ile Asn Asp	
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Cys Ser Asn Thr Phe		
115		

<210> 3487

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3487

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<210> 3488

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3488

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20	25	30
Leu Ala Asn Thr Val Lys Pro Arg	Leu Ile Leu Ser Phe	Leu Thr Pro
35	40	45
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<210> 3489
<211> 288
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<213> Homo sapiens

<400> 3489
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gcccgagggtg cccatgagg cctggtggtt ggagggcagag ggtatccctt gcccaaattc
180
gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
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288

<210> 3490
<211> 90
<212> PRT
<213> Homo sapiens

<400> 3490
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Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile
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Gln Ala Gln Pro Arg Val Pro His Glu Ala Trp Trp Leu Glu Ala Glu
35 40 45
Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser
50 55 60
Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr
65 70 75 80
Leu Glu Ser Pro Lys Thr Thr Asp His Glu
85 90

<210> 3491
<211> 568
<212> DNA
<213> Homo sapiens

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tcgcttctgc tgacggccac agacgatgg tccatcaggg tctggaagaa ttttgcgtat
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<210> 3492
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 3492
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 20 25 30
 Gly Glu Lys Leu Asp Tyr Phe His Asn Gly Asn Pro Arg Tyr Thr Arg
 35 40 45
 Val Thr Ala Met Glu Tyr Leu Asn Gly Gln Asp Cys Ser Leu Leu Leu
 50 55 60
 Thr Ala Thr Asp Asp Gly Ala Ile Arg Val Trp Lys Asn Phe Ala Asp
 65 70 75 80
 Leu Glu Lys Asn Pro Glu Met Val Thr Ala Trp Gln Gly Leu Ser Asp
 85 90 95
 Met Leu Pro Thr Thr Arg Gly Ala Gly Met Val Val Asp Trp Glu Gln
 100 105 110
 Glu Thr Gly Leu Leu Met Ser Ser Gly Asp Val Arg Ile Val Arg Ile
 115 120 125
 Trp Asp Thr Asp Arg Glu Met Lys Val Gln Asp Ile Pro Thr Gly Ala
 130 135 140
 Asp Ser Cys Val Thr Ser Leu Ser Cys Asp Ser His Arg Ser Leu Ile
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 Val Ala Gly Leu Gly Asp Gly Ser Ile Arg Val Tyr Asp Arg Arg Met
 165 170 175
 Ala Leu Ser Glu Cys Arg Val Met Thr Tyr Arg Glu His
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<210> 3493
 <211> 2244
 <212> DNA
 <213> Homo sapiens

<400> 3493
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780
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1680

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 1860
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 1920
 ttgtacAGTT atAAATATGT AAACATGAGT tATTTGATT gAAATGAATC GATTGCTTT
 1980
 tGTGtaATTt TAATTGTAAT AAAACAATTt AAAAGCAAGT CTCTATGTTT AAGAAATCTA
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 ctTTTCCGGC caggcgcGGT ggctcatGCC tGtaatCCCA gcacttCGGG aggCCGAGGC
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 2220
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 2244

<210> 3494
 <211> 628
 <212> PRT
 <213> Homo sapiens

<400> 3494
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 35 40 45
 Arg Ser Glu Ala Ser Glu Arg Ser Asp His Glu Asp Asn Asp Pro Ser
 50 55 60
 Asp Val Asp Gln His Ser Gly Ser Glu Ala Pro Asn Asp Asp Glu Asp
 65 70 75 80
 Glu Gly His Arg Ser Asp Gly Gly Ser His His Ser Glu Ala Glu Gly
 85 90 95
 Ser Glu Lys Ala His Ser Asp Asp Glu Lys Trp Gly Arg Glu Asp Lys
 100 105 110
 Ser Asp Gln Ser Asp Asp Glu Lys Ile Gln Asn Ser Asp Asp Glu Glu
 115 120 125
 Arg Ala Gln Gly Ser Asp Glu Asp Lys Leu Gln Asn Ser Asp Asp Asp
 130 135 140
 Glu Lys Met Gln Asn Thr Asp Asp Glu Glu Arg Pro Gln Leu Ser Asp
 145 150 155 160
 Asp Glu Arg Gln Gln Leu Ser Glu Glu Lys Ala Asn Ser Asp Asp
 165 170 175
 Glu Arg Pro Val Ala Ser Asp Asn Asp Asp Glu Lys Gln Asn Ser Asp
 180 185 190
 Asp Glu Glu Gln Pro Gln Leu Ser Asp Glu Glu Lys Met Gln Asn Ser
 195 200 205
 Asp Asp Glu Arg Pro Gln Ala Pro Asp Glu Glu His Arg His Ser Asp

210	215	220
Asp Glu Glu Glu Gln Asp His Lys Ser Glu Ser Ala Arg Gly Ser Asp		
225	230	235
Ser Glu Asp Glu Val Leu Arg Met Lys Arg Lys Asn Ala Ile Ala Ser		
245	250	255
Asp Ser Glu Ala Asp Ser Asp Thr Glu Val Pro Lys Asp Asn Ser Gly		
260	265	270
Thr Met Asp Leu Phe Gly Gly Ala Asp Asp Ile Ser Ser Gly Ser Asp		
275	280	285
Gly Glu Asp Lys Pro Pro Thr Pro Gly Gln Pro Val Asp Glu Asn Gly		
290	295	300
Leu Pro Gln Asp Gln Gln Glu Glu Glu Pro Ile Pro Glu Thr Arg Ile		
305	310	315
Glu Val Glu Ile Pro Lys Val Asn Thr Asp Leu Gly Asn Asp Leu Tyr		
325	330	335
Phe Val Lys Leu Pro Asn Phe Leu Ser Val Glu Pro Arg Pro Phe Asp		
340	345	350
Pro Gln Tyr Tyr Glu Asp Glu Phe Glu Asp Glu Glu Met Leu Asp Glu		
355	360	365
Glu Gly Arg Thr Arg Leu Lys Leu Lys Val Glu Asn Thr Ile Arg Trp		
370	375	380
Arg Ile Arg Arg Asp Glu Glu Gly Asn Glu Ile Lys Glu Ser Asn Ala		
385	390	395
Arg Ile Val Lys Trp Ser Asp Gly Ser Met Ser Leu His Leu Gly Asn		
405	410	415
Glu Val Phe Asp Val Tyr Lys Ala Pro Leu Gln Gly Asp His Asn His		
420	425	430
Leu Phe Ile Arg Gln Gly Thr Gly Leu Gln Gly Gln Ala Val Phe Lys		
435	440	445
Ala Lys Leu Thr Phe Arg Pro His Ser Thr Asp Ser Ala Thr His Arg		
450	455	460
Lys Met Thr Leu Ser Leu Ala Asp Arg Cys Ser Lys Thr Gln Lys Ile		
465	470	475
Arg Ile Leu Pro Met Ala Gly Arg Asp Pro Glu Cys Gln Arg Thr Glu		
485	490	495
Met Ile Lys Lys Glu Glu Glu Arg Leu Arg Ala Ser Ile Arg Arg Glu		
500	505	510
Ser Gln Gln Arg Arg Met Arg Glu Lys Gln His Gln Arg Gly Leu Ser		
515	520	525
Ala Ser Tyr Leu Glu Pro Asp Arg Tyr Asp Glu Glu Glu Gly Glu		
530	535	540
Glu Ser Ile Ser Leu Ala Ala Ile Lys Asn Arg Tyr Lys Gly Gly Ile		
545	550	555
Arg Glu Glu Arg Ala Arg Ile Tyr Ser Ser Asp Ser Asp Glu Gly Ser		
565	570	575
Glu Glu Asp Lys Ala Gln Arg Leu Leu Lys Ala Lys Lys Leu Thr Ser		
580	585	590
Asp Glu Glu Gly Glu Pro Ser Gly Lys Arg Lys Ala Glu Asp Asp Asp		
595	600	605
Lys Ala Asn Lys Lys His Lys Lys Tyr Val Ile Ser Asp Glu Glu Glu		
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Glu Asp Asp Asp		
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<210> 3495
<211> 1085
<212> DNA
<213> Homo sapiens

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180
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480
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<210> 3496
<211> 337
<212> PRT
<213> Homo sapiens

<400> 3496
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35	40	45
Ser Gln Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Asp Val Tyr		
50	55	60
Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro		
65	70	75
Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly		
85	90	95
Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu		
100	105	110
Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala		
115	120	125
Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys		
130	135	140
Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln		
145	150	155
Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr		
165	170	175
Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp		
180	185	190
Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile		
195	200	205
Ile Glu Val His Val Glu Lys Gly Met Lys Asp Gly Gln Lys Ile Leu		
210	215	220
Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val		
225	230	235
Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly		
245	250	255
His Asp Leu Ile Met Lys Met Ile Gln Leu Ser Glu Ala Leu Cys		
260	265	270
Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile		
275	280	285
Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val		
290	295	300
Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile		
305	310	315
Leu Ile Ile Gln Phe Leu Val Ile Phe Pro Xaa Lys His Trp Leu Ser		
325	330	335
Leu		

<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

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180

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<210> 3498
<211> 210
<212> PRT
<213> Homo sapiens

<400> 3498

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 35 40 45
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
 50 55 60
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
 65 70 75 80
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
 85 90 95
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
 100 105 110
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
 115 120 125
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
 130 135 140
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
 145 150 155 160
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
 165 170 175
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
 180 185 190
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
 195 200 205
 Glu Ser
 210

<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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<210> 3500  
<211> 168  
<212> PRT  
<213> Homo sapiens
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<400> 3500
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      20          25          30
Ala Ser Thr Gly Lys Gln Gly Ala Pro Gly Pro Asp Trp Ala Cys Ile
      35          40          45
Phe His Val Val Leu Gln Pro Ser Arg His Gly Pro Glu Ala Thr Ala
      50          55          60
Ala Pro Gln Ser Pro Pro Thr Pro Ala Val Pro Pro Gly His Gly Ala
      65          70          75          80
His Asp Ser Gly Pro Gly Gln Arg Gln Arg Gln Gly Ala Gly Ser Thr
      85          90          95
Pro Ala Arg Val Pro Val His Gly Ser Pro Ser Ser Cys Arg Ala Leu
      100         105         110
Arg Pro Ala Gly Arg Ser Ser Arg Ala Ala Pro Arg Ala Ser Pro Ala
      115         120         125
Gly Gln Ala Ser Ser Arg Pro Xaa Ser Gly Ala Met His Arg Leu Gly
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Glu Gly Asn Arg Ala Gly Glu Lys Val Phe Arg Arg Thr Ala Val Gln
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Lys Arg Arg Val Gly Gly Gly Thr
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<211> 691  
<212> DNA  
<213> Homo sapiens
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300
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 480
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<210> 3502

<211> 196

<212> PRT

<213> Homo sapiens

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 35 40 45
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn
 50 55 60
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile
 65 70 75 80
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala
 85 90 95
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu
 100 105 110
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met
 115 120 125
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu
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 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu
 145 150 155 160
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<211> 857

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<213> Homo sapiens

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 35 40 45
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 50 55 60
 Thr Asn Ala Val Gln Arg Arg Val Gln Glu Ile Val Arg Phe Thr Arg
 65 70 75 80
 Gln Leu Gln Arg Val His Pro Asn Val Leu Ala Lys Ala Leu Thr Arg
 85 90 95
 Gly Ile Leu His Gln Asp Lys Asn Leu Val Val Ile Asn Lys Pro Tyr
 100 105 110
 Gly Leu Pro Val His Gly Gly Pro Gly Val Gln Leu Cys Ile Thr Asp
 115 120 125
 Val Leu Pro Ile Leu Ala Lys Met Leu His Gly His Lys Ala Glu Pro

130	135	140
Leu His Leu Cys His Arg Leu Asp Lys Glu Thr Thr Gly Val Met Val		
145	150	155
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val Gln Glu Leu Phe Arg		160
165	170	175
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro		
180	185	190
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly		
195	200	205
Gln Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg		
210	215	220
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln		
225	230	235
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala		240
245	250	255
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val		
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His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp		
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<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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<211> 502

<212> PRT

<213> Homo sapiens

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 35 40 45
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 50 55 60
 Phe Leu Leu Lys Ala Ile Met Arg Thr Met Trp Phe Ala Gly Gly Phe
 65 70 75 80
 His Arg Val Ala Val Lys Gly Arg Gln Ala Leu Pro Thr Glu Ala Ala
 85 90 95
 Ile Leu Thr Leu Ala Pro His Ser Ser Tyr Phe Asp Ala Ile Pro Val
 100 105 110
 Thr Met Thr Met Ser Ser Ile Val Met Lys Thr Glu Ser Arg Asp Ile
 115 120 125
 Pro Ile Trp Gly Thr Leu Ile Gln Tyr Ile Arg Pro Val Phe Val Ser
 130 135 140
 Arg Ser Asp Gln Asp Ser Arg Arg Lys Thr Val Glu Glu Ile Lys Arg
 145 150 155 160
 Arg Ala Gln Ser Asn Gly Lys Trp Pro Gln Ile Met Ile Phe Pro Glu

165	170	175
Gly Thr Cys Thr Asn Arg Thr Cys Leu Ile Thr Phe Lys Pro Gly Ala		
180	185	190
Phe Ile Pro Gly Ala Pro Val His Pro Gly Val Leu Arg Tyr Pro Asn		
195	200	205
Lys Leu Asp Thr Ile Thr Trp Thr Trp Gln Gly Pro Gly Ala Leu Glu		
210	215	220
Ile Leu Trp Leu Thr Leu Cys Gln Phe His Asn Gln Val Glu Ile Glu		
225	230	235
Phe Leu Pro Val Tyr Ser Pro Ser Glu Glu Lys Arg Asn Pro Ala		
245	250	255
Leu Tyr Ala Ser Asn Val Arg Arg Val Met Ala Glu Ala Leu Gly Val		
260	265	270
Ser Val Thr Asp Tyr Thr Phe Glu Asp Cys Gln Leu Ala Leu Ala Glu		
275	280	285
Gly Gln Leu Arg Leu Pro Ala Asp Thr Cys Leu Leu Glu Phe Ala Arg		
290	295	300
Leu Val Arg Gly Leu Gly Leu Lys Pro Glu Lys Leu Glu Lys Asp Leu		
305	310	315
Asp Arg Tyr Ser Glu Arg Ala Arg Met Lys Gly Glu Lys Ile Gly		
325	330	335
Ile Ala Glu Phe Ala Ala Ser Leu Glu Val Pro Val Ser Asp Leu Leu		
340	345	350
Glu Asp Met Phe Ser Leu Phe Asp Glu Ser Gly Ser Gly Glu Val Asp		
355	360	365
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385	390	395
Asp Gly Ser Val Gly Glu Gly Asp Leu Ser Cys Ile Leu Lys Thr Ala		
405	410	415
Leu Gly Val Ala Glu Leu Thr Val Thr Asp Leu Phe Arg Ala Ile Asp		
420	425	430
Gln Glu Glu Lys Gly Lys Ile Thr Phe Ala Asp Phe His Arg Phe Ala		
435	440	445
Glu Met Tyr Pro Ala Phe Ala Glu Glu Tyr Leu Tyr Pro Asp Gln Thr		
450	455	460
His Phe Glu Ser Cys Ala Glu Thr Ser Pro Ala Pro Ile Pro Asn Gly		
465	470	475
Phe Cys Ala Asp Phe Ser Pro Glu Asn Ser Asp Ala Gly Arg Lys Pro		
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<210> 3507

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3507

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120

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<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508
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 Asp Arg Lys Phe Thr Ile Ser Leu Thr Ala Phe Leu Phe Ile Leu Pro
 65 70 75 80
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 85 90 95
 Ser Val Val Gly Thr Trp Tyr Val Thr Ala Ile Val Ile Ile Lys Tyr
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 Ile Trp Pro Asp Lys Glu Met Thr Pro Gly Asn Ile Leu Thr Arg Pro
 115 120 125
 Ala Ser Trp Met Ala Val Phe Asn Ala Met Pro Thr Ile Cys Phe Gly
 130 135 140
 Phe Gln Cys His Val Ser Ser Val Pro Val Phe Asn Ser Met Gln Gln
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 Pro Glu Val Lys Thr Trp Gly Gly Val Val Thr Ala Ala Met Val Ile

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Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg		
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3319

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<212> PRT

<213> Homo sapiens

<400> 3512

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Glu Gly Thr Ala Glu Lys Ser Lys Lys Leu Arg Thr Thr Asn Glu His			
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Ser Gln Thr Cys Asp Trp Gly Asn Leu Leu Gln Asp Ile Ile Leu Gln			
65	70	75	80
Val Phe Lys Tyr Leu Pro Leu Leu Asp Arg Ala His Ala Ser Gln Val			
85	90	95	
Cys Arg Asn Trp Asn Gln Val Phe His Met Pro Asp Leu Trp Arg Cys			
100	105	110	
Phe Glu Phe Glu Leu Asn Gln Pro Ala Thr Ser Tyr Leu Lys Ala Thr			
115	120	125	
His Pro Glu Leu Ile Lys Gln Ile Ile Lys Arg His Ser Asn His Leu			
130	135	140	
Gln Tyr Val Ser Phe Lys Val Asp Ser Ser Lys Glu Ser Ala Glu Ala			
145	150	155	160
Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu Lys Thr Leu			
165	170	175	
Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu Pro Lys Ser			
180	185	190	
His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser Lys Ser Leu			
195	200	205	
Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro Ser Leu Lys			
210	215	220	
Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu Lys Met Ser			
225	230	235	240
Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val Ala Asp Gln			
245	250	255	
Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu Leu Ser Asp			
260	265	270	
Glu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg Leu Glu His			
275	280	285	
Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr His Phe His			
290	295	300	
Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His Ser Pro Lys			
305	310	315	320
Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Phe Asp Pro			
325	330	335	
Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe Gly Arg Ser			
340	345	350	
Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys Pro Arg Leu			

355	360	365
Val Glu Leu Val Val Cys Ala Asn Gly Leu Arg Pro Leu Asp Glu Glu		
370	375	380
Leu Ile Arg Ile Ala Glu Arg Cys Lys Asn Leu Ser Ala Ile Gly Leu		
385	390	395
Gly Glu Cys Glu Val Ser Cys Ser Ala Phe Val Glu Phe Val Lys Met		
405	410	415
Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met Glu Glu Val Leu Ile		
420	425	430
Pro Asp Gln Lys Tyr Ser Leu Glu Gln Ile His Trp Glu Val Ser Lys		
435	440	445
His Leu Gly Arg Val Trp Phe Pro Asp Met Met Pro Thr Trp		
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<210> 3513

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 3513

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 1980
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 2103

<210> 3514
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 <212> PRT
 <213> Homo sapiens

<400> 3514
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 Ala Lys Lys Ser Gln Gly Leu Trp Ser Asp Tyr Ser Glu Tyr Glu Pro
 35 40 45
 Lys Gly Glu Ser Gln Asn Thr Asp Leu Ser Pro Lys Pro Leu Ile Ser
 50 55 60
 Glu Gln Thr Val Ile Leu Gly Lys Thr Pro Leu Gly Arg Ile Asp Gln

	70		75		80
Glu Asn Asn Glu Thr Lys Gln Ser Phe Cys Leu Ser Pro Asn Ser Val					
85		90			95
Asp His Arg Glu Val Gln Val Leu Ser Gln Ser Met Pro Leu Thr Pro					
100		105			110
His Gln Ala Val Pro Ser Gly Glu Arg Pro Tyr Met Cys Val Glu Cys					
115		120			125
Gly Lys Cys Phe Gly Arg Ser Ser His Leu Leu Gln His Gln Arg Ile					
130		135			140
His Thr Gly Glu Lys Pro Tyr Val Cys Ser Val Cys Gly Lys Ala Phe					
145		150			160
Ser Gln Ser Ser Val Leu Ser Lys His Arg Arg Ile His Thr Gly Glu					
165		170			175
Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Arg Val Ser Ser					
180		185			190
Asp Leu Ala Gln His His Lys Ile His Thr Gly Glu Lys Pro His Glu					
195		200			205
Cys Leu Glu Cys Arg Lys Ala Phe Thr Gln Leu Ser His Leu Ile Gln					
210		215			220
His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr Val Cys Pro Leu Cys					
225		230			240
Gly Lys Ala Phe Asn His Ser Thr Val Leu Arg Ser His Gln Arg Val					
245		250			255
His Thr Gly Glu Lys Pro His Arg Cys Asn Glu Cys Gly Lys Thr Phe					
260		265			270
Ser Val Lys Arg Thr Leu Leu Gln His Gln Arg Ile His Thr Gly Glu					
275		280			285
Lys Pro Tyr Thr Cys Ser Glu Cys Gly Lys Ala Phe Ser Asp Arg Ser					
290		295			300
Val Leu Ile Gln His His Asn Val His Thr Gly Glu Lys Pro Tyr Glu					
305		310			320
Cys Ser Glu Cys Gly Lys Thr Phe Ser His Arg Ser Thr Leu Met Asn					
325		330			335
His Glu Arg Ile His Thr Glu Glu Lys Pro Tyr Ala Cys Tyr Glu Cys					
340		345			350
Gly Lys Ala Phe Val Gln His Ser His Leu Ile Gln His Gln Arg Val					
355		360			365
His Thr Gly Glu Lys Pro Tyr Val Cys Gly Glu Cys Gly His Ala Phe					
370		375			380
Ser Ala Arg Arg Ser Leu Ile Gln His Glu Arg Ile His Thr Gly Glu					
385		390			400
Lys Pro Phe Gln Cys Thr Glu Cys Gly Lys Ala Xaa Ser Leu Lys Ala					
405		410			415
Thr Leu Ile Val His Leu Arg Thr His Thr Gly Glu Lys Pro Tyr Glu					
420		425			430
Cys Asn Ser Cys Gly Lys Ala Phe Ser Gln Tyr Ser Val Leu Ile Gln					
435		440			445
His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Gly Glu Cys					
450		455			460
Gly Arg Ala Phe Asn Gln His Gly His Leu Ile Gln His Gln Lys Val					
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His Arg Lys Leu					

<210> 3515
<211> 5003
<212> DNA
<213> Homo sapiens

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180
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240
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300
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420
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<210> 3516
 <211> 547
 <212> PRT
 <213> Homo sapiens

<400> 3516
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 20 25 30
 Asp Gln Ile Gln Thr Leu Met Leu Gln Asn Arg Thr Leu Leu Glu Gln
 35 40 45
 Asn Met Glu Ser Lys Asp Leu Phe His Val Glu Gln Arg Gln Tyr Ile
 50 55 60
 Asp Lys Leu Asn Glu Leu Arg Arg Gln Lys Glu Lys Leu Glu Glu Lys
 65 70 75 80
 Ile Met Asp Gln Tyr Lys Phe Tyr Asp Pro Ser Pro Pro Arg Arg Arg
 85 90 95
 Gly Asn Trp Ile Thr Leu Lys Met Arg Lys Leu Ile Lys Ser Lys Lys
 100 105 110
 Asp Ile Asn Arg Glu Arg Gln Lys Ser Leu Thr Leu Thr Pro Thr Arg
 115 120 125
 Ser Asp Ser Ser Glu Gly Phe Leu Gln Leu Pro His Gln Asp Ser Gln
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 Asp Ser Ser Ser Val Gly Ser Asn Ser Leu Glu Asp Gly Gln Thr Leu
 145 150 155 160
 Gly Thr Lys Lys Ser Ser Thr Met Asn Asp Leu Val Gln Ser Met Val
 165 170 175
 Leu Ala Gly Gln Trp Thr Gly Ser Thr Glu Asn Leu Glu Val Pro Asp
 180 185 190
 Asp Ile Ser Thr Gly Lys Arg Arg Lys Glu Leu Gly Ala Met Ala Phe
 195 200 205
 Ser Thr Thr Ala Ile Asn Phe Ser Thr Val Asn Ser Ser Ala Gly Phe
 210 215 220
 Arg Ser Lys Gln Leu Val Asn Asn Lys Asp Thr Thr Ser Phe Glu Asp
 225 230 235 240
 Ile Ser Pro Gln Gly Val Ser Asp Asp Ser Ser Thr Gly Ser Arg Val
 245 250 255
 His Ala Ser Arg Pro Ala Ser Leu Asp Ser Gly Arg Thr Ser Thr Ser
 260 265 270
 Asn Ser Asn Asn Asn Ala Ser Leu His Glu Val Lys Ala Gly Ala Val

275	280	285
Asn Asn Gln Ser Arg Pro Gln Ser His Ser Ser Gly	Glu Phe Ser Leu	
290	295	300
Leu His Asp His Glu Ala Trp Ser Ser Ser Gly	Ser Ser Pro Ile Gln	
305	310	315
Tyr Leu Lys Arg Gln Thr Arg Ser Ser Pro Val	Leu Gln His Lys Ile	320
325	330	335
Ser Glu Thr Leu Glu Ser Arg His His Lys Ile	Lys Thr Gly Ser Pro	
340	345	350
Gly Ser Glu Val Val Thr Leu Gln Gln Phe Leu	Glu Ser Asn Lys	
355	360	365
Leu Thr Ser Val Gln Ile Lys Ser Ser Ser Gln	Glu Asn Leu Leu Asp	
370	375	380
Glu Val Met Lys Ser Leu Ser Val Ser Ser Asp	Phe Leu Gly Lys Asp	
385	390	395
Lys Pro Val Ser Cys Gly Leu Ala Arg Ser Val	Ser Gly Lys Thr Pro	
405	410	415
Gly Asp Phe Tyr Asp Arg Arg Thr Thr Lys Pro	Glu Phe Leu Arg Pro	
420	425	430
Gly Pro Arg Lys Thr Glu Asp Thr Tyr Phe Ile	Ser Ser Ala Gly Lys	
435	440	445
Pro Thr Pro Gly Thr Gln Gly Lys Ile Lys Leu	Val Lys Glu Ser Ser	
450	455	460
Leu Ser Arg Gln Ser Lys Asp Ser Asn Pro Tyr	Ala Thr Leu Pro Arg	
465	470	475
Ala Ser Ser Val Ile Ser Thr Ala Glu Gly Thr	Thr Arg Arg Thr Ser	
485	490	495
Ile His Asp Phe Leu Thr Lys Asp Ser Arg Leu	Pro Ile Ser Val Asp	
500	505	510
Ser Pro Pro Ala Ala Ala Asp Ser Asn Thr Thr	Ala Ala Ser Asn Val	
515	520	525
Asp Lys Val Gln Glu Ser Arg Asn Ser Lys Ser	Arg Ser Arg Glu Gln	
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545		

<210> 3517
<211> 342
<212> DNA
<213> Homo sapiens

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<210> 3518
<211> 99
<212> PRT
<213> Homo sapiens

<400> 3518
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Ile Val Ala Ser Phe Val Leu Ala Gly Glu Thr Glu Ala Thr Ala Leu
35 40 45
Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala
50 55 60
Ser Leu Ser Pro Ser Gly Leu Gly Ala Cys Asp Thr Ala Leu Arg Pro
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Thr Arg Ser Trp Gly Ala Cys Trp Gln Trp Leu Gly His Ser Cys Ser
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Gly Gln Gly

<210> 3519
<211> 2207
<212> DNA
<213> Homo sapiens

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<211> 303
<212> PRT
<213> Homo sapiens

<400> 3520

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 Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser
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<210> 3521

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3521

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

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Gln	His	Ala	Asp	Gln	Gly	Pro	Pro	Gly	Pro	His	Leu	Asp	Leu	His	Gln
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Pro	Ala	Gly	Pro	Pro	Gly	Gly	His	Gly	Pro	Ala	Gly	Arg	Gly	Gln	
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Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
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<211> 2614

<212> DNA

<213> Homo sapiens

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<211> 444

<212> PRT

<213> Homo sapiens

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145	150	155
Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp		
165	170	175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp		
180	185	190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro		
195	200	205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn		
210	215	220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Ala		
225	230	235
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr		
245	250	255
Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro		
260	265	270
Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile		
275	280	285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val		
290	295	300
Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu		
305	310	315
Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp		
325	330	335
Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn		
340	345	350
Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys		
355	360	365
Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu		
370	375	380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala		
385	390	395
Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser		
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<211> 1116

<212> DNA

<213> Homo sapiens

<400> 3525

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<210> 3526
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 35 40 45
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 50 55 60
 Asp Trp Ile Lys Arg Cys Gln Glu Ala Gln Asn Gly Ser Glu Ser Glu
 65 70 75 80
 Val Val Met Glu Pro Ala Leu Glu Gly Thr Gly Lys Glu Gly Lys Lys
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 Ala Ser Ser Arg Lys Arg Thr Leu Ala Glu Pro Pro Ala Lys Gly Leu
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Ser Glu Lys Lys Lys Asp Arg Ile Asp Ala Phe Leu Arg Glu Val Asn		
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Gln Arg Val Val Arg Val Pro Ser Val Pro Glu Thr Glu Leu Thr Asp		
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Gln Ala Trp Leu Pro Ala Gly Val Arg Val Pro Leu His Gln Val Pro		
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Tyr Ala Val Lys Gly Cys Phe Arg Phe Leu Pro Pro Ala Gln Val Thr		
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Val Val Gly Ser Tyr Leu Leu Gly Thr Cys Ile Arg Pro Asp Ile Asn		
225	230	235
Val Asp Val Ala Leu Thr Met Pro Arg Glu Ile Leu Gln Asp Lys Asp		
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Gly Leu Asn Gln Arg Tyr Phe Arg Lys Arg Ala Leu Tyr Leu Ala His		
260	265	270
Leu Ala His His Leu Ala Gln Asp Pro Leu Phe Gly Ser Val Cys Phe		
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<212> DNA

<213> Homo sapiens

<400> 3527

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<210> 3528
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 Pro Gly Pro Pro Gly Pro Gly Pro Ile Gln Leu Gln Gln Asp
 35 40 45
 Asp Leu Gly Ala Ala Phe Gln Thr Trp Met Asp Thr Ser Gly Ala Leu
 50 55 60
 Arg Pro Glu Ser Tyr Ser Tyr Pro Asp Arg Leu Val Leu Asp Gln Gly
 65 70 75 80
 Gly Glu Ile Phe Lys Thr Leu His Tyr Leu Ser Asn Leu Ile Gln Ser
 85 90 95
 Ile Lys Thr Pro Leu Gly Thr Lys Glu Asn Pro Ala Arg Val Cys Arg
 100 105 110
 Asp Leu Met Asp Cys Glu Gln Lys Met Val Asp Gly Thr Tyr Trp Val
 115 120 125
 Asp Pro Asn Leu Gly Cys Ser Ser Asp Thr Ile Glu Val Ser Cys Asn
 130 135 140
 Phe Thr His Gly Gly Gln Thr Cys Leu Lys Pro Ile Thr Ala Ser Lys
 145 150 155 160
 Val Glu Phe Ala Ile Ser Arg Val Gln Met Asn Phe Leu His Leu Leu
 165 170 175
 Ser Ser Glu Val Thr Gln His Ile Thr Ile His Cys Leu Asn Met Thr
 180 185 190
 Val Trp Gln Glu Gly Thr Gly Gln Thr Pro Ala Lys Gln Ala Val Arg
 195 200 205
 Phe Arg Ala Trp Asn Gly Gln Ile Phe Glu Ala Gly Gly Gln Phe Arg
 210 215 220
 Pro Glu Val Ser Met Asp Gly Cys Lys Val Gln Asp Gly Arg Trp His

225	230	235	240												
Gln	Thr	Leu	Phe	Thr	Phe	Arg	Thr	Gln	Asp	Pro	Gln	Gln	Leu	Pro	Ile
245															255
Ile	Ser	Val	Asp	Asn	Leu	Pro	Pro	Ala	Ser	Ser	Gly	Lys	Gln	Tyr	Arg
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Leu	Glu	Val	Gly	Pro	Ala	Cys	Phe	Leu							
275															280

<210> 3529
<211> 3026
<212> DNA
<213> Homo sapiens

<400> 3529
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180
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240
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300
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360
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420
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480
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720
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1020
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1080
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1140
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1200

tccttcccc agttcagaca ccggcagtga gggcgaggag gatgacgagg gcgaggagca
1260 tggcctggga ggccagaatg aagtgggtat tatacccacc accctcgagt tcctggagaa
1320 ccatggaaag aatatccctt tgtctaattgg gaaccgtacg gccacacggg tggccagcta
1380 caatcagggc atcggtgtca tcaaccaacc tctggtgccc cagctgctgg tgcaggtgcg
1440 gatagatttc ctaaaccgac agtggacatc ttcccttgc tcggaggtca tcacctgcgc
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1620 ggacacgtgc cctgaaggca ccattctggg actgcggctg gacagctctg gggggctgca
1680 tcttcatgtt aatgggggtgg accaggggtt agctgtgcc aatgtgcccc agccctgcca
1740 tgcgctgtg gacctctatg ggcagtgtga gcaggtatca aagagagtgt gtgctgggt
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1920 tactgtgagt cttgcccggaa gctgcgagga gacgaggccc acaggcgcag aggggagcc
1980 ccccggaat atgcactgcc ctttggctgg tgcaaggttca acctcagagt gaatccccgc
2040 ctggaggctg ggacactaac caagaagtgg cacatggcat atcacggag caatgttgc
2100 gctgtacgga gagtgtggc ccgaggggag ctggagcag gtactgcctc catcctgagc
2160 tgccgtcctt tgaagggaga acctgggtta gggttcgagg agcctggcga gaactgtgca
2220 cctcctcgaa aggagcagcc ccctcctgcg ctgtttccc cttccctca atatgtgg
2280 gcgagaccc tggcctccaa agtgcaattc cgggacccca aatcccagcg gacgcaccag
2340 gctcaggtgg cgttccaggt gtgtgtgcgc cctggctct acaccccgaa acccccttcc
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2460 aaggagaagg gggccacact cctctgtgcc ctgctggtaa gggtaatg aggggtgaga
2520 caccactact acaagcacag tcgggcccgcg gccccatgga ctctgagtg ggactgcctc
2580 cacccatttc ccgtgactcg tggcatgcgc aggtgtgtgg gcttggcagc cgccgaggag
2640 catgtaggca ggctctcaga tgttaggtggc aagtggcaca gctccatgtc cggaggccca
2700 gcactccgtc tgatgggagg agccgtggaa gcccagctcc agggccctgg acccccttcc
2760 atgcactgat ttggggaaaca tgactccctt ttactccctt accccacatc acttaattta
2820

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2880
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3000
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3026

<210> 3530
<211> 206
<212> PRT
<213> *Homo sapiens*

<400> 3530
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 Thr Thr Ala Trp Arg Pro Ala Thr Leu Pro Pro Arg Ser Pro Ser His
 20 25 30
 Cys Xaa Ser Pro Val Ala Gly Val Ala His Arg Phe His Ser Thr Cys
 35 40 45
 Gly Lys Asn Val Thr Leu Glu Glu Asp Gly Thr Arg Ala Val Arg Ala
 50 55 60
 Ala Gly Tyr Ala His Gly Leu Val Phe Ser Thr Lys Glu Leu Arg Ala
 65 70 75 80
 Glu Glu Val Phe Glu Val Lys Val Glu Glu Leu Asp Glu Lys Trp Ala
 85 90 95
 Gly Ser Leu Arg Leu Gly Leu Thr Thr Leu Ala Pro Gly Glu Met Gly
 100 105 110
 Pro Gly Ala Gly Gly Gly Pro Gly Leu Pro Pro Ser Leu Pro Glu
 115 120 125
 Leu Arg Thr Lys Thr Thr Trp Met Val Ser Ser Cys Glu Val Arg Arg
 130 135 140
 Asp Gly Gln Leu Gln Arg Met Asn Tyr Gly Arg Asn Leu Glu Arg Leu
 145 150 155 160
 Gly Val Lys Trp Leu Ala Pro Gly Thr Gly Glu Gly Leu Gly Val Glu
 165 170 175
 Val Ala Gly Arg Gly Gly Leu Asn Ile Val Arg Pro Cys Pro Thr Ser
 180 185 190
 Val Leu Gly Gly Glu Pro Cys Gly Cys Ser Ser Gly Gly Arg
 195 200 205

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<210> 3531  
<211> 879  
<212> DNA  
<213> Homo sapiens
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<400> 3531
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120
aaaattattta aagtgaaggt tcagaagaag gcagatatgg tgaacgaaga cttgctgagt
180
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gatggAACGA gtgAGAAATGA atctGGATTt tggGATTcCT tcAAATGGGG ctttACAGGA
 240
 cagaAGAAGTgAA gcaAGATAAA gatGACATAA ttaATATTTT ctccGTTGCA
 300
 tctGGTCATC tctACGAAAG atttCTTCGC ataATGATGC tatCCGTGCT gaAGAAATCC
 360
 aAGACTCCTG tgAAATTCTG gttCTTGAAG aATTACTGT cccccACATT taAGGAGTT
 420
 atACCTTACA tggCAAATGA atACAATTc cAGTATGAGC ttGTTAGTA caAAATGGCCC
 480
 cggtGGCTTC atCAACAAAC tgAAAAACAG cgtATCATCT gggGTTACAA gatCCtCTTC
 540
 ctggATGTAC tttcccACT agttGTTGAC aAGttCCTGT ttGTTGGATGC tgATCAGATT
 600
 gtacGAACAG atctGAAAGA gttaAGAGAT ttCAATTGG atGGTGCtCC ttATGGTTAC
 660
 actcCTTCT gtGACAGCCG aAGAGAAATG gacGGCTACA ggTTCTGAA gtcAGGGTAC
 720
 tggGCCAGTC atttagCCGG gcGAAAGTAT cataTCAGGT actGAAAAGA agcACTCCTA
 780
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 840
 tacATTGgTA tggTTGAAAA ataaaaATGA taaaaAAATA
 879

<210> 3532
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 3532
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 Tyr Ser His Asp Gly Thr Asp Ser Pro Pro Asp Ala Asp Glu Val Val
 20 25 30
 Ile Val Leu Asn Asn Phe Lys Ser Lys Ile Ile Lys Val Lys Val Gln
 35 40 45
 Lys Lys Ala Asp Met Val Asn Glu Asp Leu Leu Ser Asp Gly Thr Ser
 50 55 60
 Glu Asn Glu Ser Gly Phe Trp Asp Ser Phe Lys Trp Gly Phe Thr Gly
 65 70 75 80
 Gln Lys Thr Glu Glu Val Lys Gln Asp Lys Asp Asp Ile Ile Asn Ile
 85 90 95
 Phe Ser Val Ala Ser Gly His Leu Tyr Glu Arg Phe Leu Arg Ile Met
 100 105 110
 Met Leu Ser Val Leu Lys Asn Thr Lys Thr Pro Val Lys Phe Trp Phe
 115 120 125
 Leu Lys Asn Tyr Leu Ser Pro Thr Phe Lys Glu Phe Ile Pro Tyr Met
 130 135 140
 Ala Asn Glu Tyr Asn Phe Gln Tyr Glu Leu Val Gln Tyr Lys Trp Pro
 145 150 155 160
 Arg Trp Leu His Gln Gln Thr Glu Lys Gln Arg Ile Ile Trp Gly Tyr
 165 170 175
 Lys Ile Leu Phe Leu Asp Val Leu Phe Pro Leu Val Val Asp Lys Phe

180	185	190
Leu Phe Val Asp Ala Asp Gln Ile Val Arg Thr Asp Leu Lys Glu Leu		
195	200	205
Arg Asp Phe Asn Leu Asp Gly Ala Pro Tyr Gly Tyr Thr Pro Phe Cys		
210	215	220
Asp Ser Arg Arg Glu Met Asp Gly Tyr Arg Phe Trp Lys Ser Gly Tyr		
225	230	235
Trp Ala Ser His Leu Ala Gly Arg Lys Tyr His Ile Arg Tyr		
245	250	

<210> 3533
<211> 1151
<212> DNA
<213> Homo sapiens

<400> 3533
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cgaatccataa ccgcacatctt ctcttttagct ggactgaacc caaacatgaa tgtcaacagc
120
atggacatga ccgggtggctt gtcggtaag gacccatccc agtcccagtc acgcctcccc
180
cagtggacgc accccaactc catggataac ttgcccaagtg ccgcttcccc cctggagcag
240
aacccttagca agcatggtgc tatccctgga ggtctaagca ttgggcctcc aggttaagtcc
300
tccatttgatg actccttatgg ccggtacgat ttaatccaga acagttagtc accagccagt
360
cctccctgtatg ctgttccccca tagctggtca cgtgc当地 atctgacatgtca taatctca
420
aatggctcta gcatcaactg gcccccaagaa ttccatccgg gagttccatg gaaaggactg
480
cagaatattg accctgagaa tgaccctgac gtcactcctg gcagtgtccc cactggcct
540
accatcaaca ccaccatcca ggatgtcaac cgctacctcc tcaagagtgg agggcctcc
600
ccggccatcat ctcagaatgc cacgctgcct tcttcgagtg cctggccact cagtgccctcc
660
ggctacagta gctctttcag cagcattgca tccgc当地 ctgttgcagg taaactgtca
720
gacatcaaataat cgacgtggtc ctctggccct acctcccaca cgcaaggctc tctgtctcat
780
gaactatgga aggtgcccag aaacagtaact gcacccacga ggccacccatcc agggtaacc
840
aatcccaagc ctcctccac ctggggtgcc agccccctcg gctggaccag ctcctactcc
900
tcgggttctg cctggagcac cgacacctca ggaagaacca gcagctggct cgttcttcga
960
aacctcaactc cccaggtgca atatggtgc cctgc当地 ttagcatgat ccagggaggg
1020
ttccccgttg gcccccaatg cagatgaggc tgtctggtgg ggcaggatag ttgggggttc
1080
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1140

ccagcagcgg c
1151

<210> 3534
<211> 313
<212> PRT
<213> Homo sapiens

<400> 3534
Met Asn Val Asn Ser Met Asp Met Thr Gly Gly Leu Ser Val Lys Asp
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Pro Ser Gln Ser Gln Ser Arg Leu Pro Gln Trp Thr His Pro Asn Ser
20 25 30
Met Asp Asn Leu Pro Ser Ala Ala Ser Pro Leu Glu Gln Asn Pro Ser
35 40 45
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys
50 55 60
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser
65 70 75 80
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg
85 90 95
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp
100 105 110
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile
115 120 125
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly
130 135 140
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys
145 150 155 160
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser
165 170 175
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Phe Ser
180 185 190
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys
195 200 205
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser
210 215 220
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro
225 230 235 240
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser
245 250 255
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr
260 265 270
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr
275 280 285
Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly
290 295 300
Gly Phe Pro Leu Gly Pro Gln Cys Arg
305 310

<210> 3535
<211> 723
<212> DNA
<213> Homo sapiens

<400> 3535
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ctactgagac agacaaaccc tcagcccagg acagcagagg ccgtgggagt tcaggccaac
120
cggcagacct gctacagggtt ctctctgctg gtgaccaccc accccacaac cactcaagaa
180
gcctcatcaa aacattgttg gagaaaaactg ggtgcccacg gaggagaaac ggaatgcaag
240
gagattgcaa tctgtgctt gaaccagatg cactattact aatagctgga ggaaattttg
300
aagatcagct tagagaagaa gtggtccaga gagtttctct tctccttc tattacatta
360
ttcatcagga agagatctgt tcttcaaagc tcaacatgag taataaagag tataaatttt
420
acctacacag cctactgagc ctcaggcagg atgaagattc ctcttcctt tcacagaatg
480
agacagaaga tatcttggct ttcaccaggc agtactttga cacttctcaa agccagtgt
540
tggaaaccaa aacgctgcag aaaaaatctg gaatagttag cagtgaaggt gctaattgaaa
600
gtacgcttcc tcagttggca gccatgatca ttactttgtc cctccaggggt gtttgtctgg
660
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720
gta
723

<210> 3536
<211> 163
<212> PRT
<213> Homo sapiens

<400> 3536
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Ile Ala Gly Gly Asn Phe Glu Asp Gln Leu Arg Glu Glu Val Val Gln
20 25 30
Arg Val Ser Leu Leu Leu Tyr Tyr Ile Ile His Gln Glu Glu Ile
35 40 45
Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu
50 55 60
His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser
65 70 75 80
Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp
85 90 95
Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser
100 105 110
Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu
115 120 125
Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln
130 135 140
Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

145
Leu Asn Arg

150

155

160

<210> 3537

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3537
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cataaggcca agagtaagtg cgtgaatgca cttaagacaa agtcaggaca cgagcttcac
180
atgacaggcc cccgcgtgggc gaccagccag ccctggggac gggcacgcca cgccacacac
240
acactcacca ctgtacagcc tgggactccc attgcatatt cacaggcccc gccgggcagg
300
gcacctaag gctgggggag gggcaggggc agggaggagc cgtgggggtgt ccctgggtgg
360
gtggagaggg cagcatgtga gaggcaaatg tgcaccaaca ctggcgtga gacgtgagca
420
gcctcaggtg tacggcatga gatgtgtgt gttgggggt gtctcggtga cccgggaggg
480
gggtgtgtgt gagatgagca cacgaggcat gcgtggcact tgctcggtg gtggcgtgt
540
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600
aagggtccctt cagacgtgcc cctaccacgc aggcacagaa atgtttgcat aagggtccac
660
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714

<210> 3538

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3538
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Ser Trp Thr Leu Cys Lys His Phe Cys Ala Cys Trp Val Gly Ala Arg
20 25 30
Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly
35 40 45
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
50 55 60
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
65 70 75 80
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
85 90 95
Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

100	105	110
Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro		
115	120	125
Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn		
130	135	140
Met Gln Trp Glu Ser Gln Ala Val Gln Trp		
145	150	

<210> 3539

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3539

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 120
 cggggggcgg aggttgcagt gagccgagat cgccgcaggta cgctccagtc tggcgacaa
 180
 gagcgaact cgatatcaaa aaaaaaaaaa acgtcctgat cccagagcct cttcacgcgt
 240
 cccctaccac agcacttcag agaagcaggt cttaatcag tgtgtctaga tgcagctgct
 300
 gactgtcacc cctaccccgc ctctctccca gtctgcggac ggccagtcac cccattgcc
 360
 cagaatcaga cgaccctcggt ttcttccaga gccaaagctgg gcaacttccc ctggcaagcc
 420
 ttcaccagta tccacggccg tggggggcgg gcctgtctgg gggacagatg gatcctcact
 480
 gctgccaca ccgtctaccc caaggacagt gtttctctca ggaagaacca gagtgtgaat
 540
 gtgttcttgg gccacacagc catagatgag atgctgaaac tggggaaacca ccctgtccac
 600
 cgtgtcggttgc tgcaccccgaa ctaccgtcag aatgagtccttccataactttag cggggacatc
 660
 gccctcctgg agctgcagca cagcatcccc ctggggccca acgtcctccc ggtctgtctg
 720
 cccgataatg agaccctcta ccgcagccgc ttgttgggtt acgtcagttgg gtttggcatg
 780
 gagatgggtt ggttaactac tgagctgaag tactcgag
 818

<210> 3540

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3540

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Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr		
Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala		

35	40	45
Phe Thr Ser Ile His Gly Arg Gly Gly Ala	Leu Leu Gly Asp Arg	
50	55	60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro	Lys Asp Ser Val Ser	
65	70	75
Leu Arg Lys Asn Gln Ser Val Asn Val Phe	Leu Gly His Thr Ala Ile	
85	90	95
Asp Glu Met Leu Lys Leu Gly Asn His Pro	Val His Arg Val Val Val	
100	105	110
His Pro Asp Tyr Arg Gln Asn Glu Ser His	Asn Phe Ser Gly Asp Ile	
115	120	125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro	Leu Gly Pro Asn Val Leu	
130	135	140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu	Tyr Arg Ser Gly Leu Leu	
145	150	155
Gly Tyr Val Ser Gly Phe Gly Met Glu Met	Gly Trp Leu Thr Thr Glu	
165	170	175
Leu Lys Tyr Ser		
180		

<210> 3541

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3541

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120 acggctgctg cccttgtact actacctcca aatacgttct tgctggtagt ggccgcagca
180 ggaccaatta cctctttttt gctctccctc gagaagctcc agatggcgtc ttccgtggc
240 aacgtggccg acagcacaga accaacgaaa cgtatgctt cttccaagg gttagctgag
300 ttggcacatc gagaatatca ggcaggagat tttgaggcag ctgagagaca ctgcacatgcag
360 ctctggagac aagagccaga caatactggt gtgttttat tactttcatc tataacttc
420 cagtgtcgaa ggctggacag atctgctcac tttagcactc tggcaattaa acagaacccc
480 cttctggcag aagcttattc gaatttgggg aatgtgtaca aggaaagagg gcagttgcag
540 gaggcaattt agcattatcg acatgcattt cgtctcaaac ctgatttcat cgatggttat
600 attaacgctg cagccgcctt ggttagcagcg ggtgacatgg aaggggcagt acaagcttac
660 gtctctgcac tccagcctgg gtgacaaagt gaggccctgt ctcaaaaaaa aaaaaaaaaa
720 aa
722

<210> 3542

<211> 153
<212> PRT
<213> Homo sapiens

<400> 3542
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Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp
35 40 45
Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Ser Ser Ile
50 55 60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
65 70 75 80
Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
85 90 95
Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
100 105 110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
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Ala Tyr Val Ser Ala Leu Gln Pro Gly
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<210> 3543
<211> 1206
<212> DNA
<213> Homo sapiens

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<210> 3544
 <211> 273
 <212> PRT
 <213> Homo sapiens

<400> 3544
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 35 40 45
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 50 55 60
 Val Arg Ala Ser Ile Thr Asp Pro Gly Arg Leu Pro Glu Asn Pro Lys
 65 70 75 80
 Ile Pro His Gly Glu Arg Glu Phe Trp Glu Leu Cys Asn Lys Cys Asn
 85 90 95
 Leu Met Arg Pro Lys Arg Ser His His Cys Ser Arg Cys Gly His Cys
 100 105 110
 Val Arg Arg Met Asp His His Cys Pro Trp Ile Asn Asn Cys Val Gly
 115 120 125
 Glu Asp Asn His Trp Leu Phe Leu Gln Leu Cys Phe Tyr Thr Glu Leu
 130 135 140
 Leu Thr Cys Tyr Ala Leu Met Phe Ser Phe Cys His Tyr Tyr Tyr Phe
 145 150 155 160
 Leu Pro Leu Lys Lys Arg Asn Leu Asp Leu Phe Val Phe Arg His Glu
 165 170 175
 Leu Ala Ile Met Arg Leu Ala Ala Phe Met Gly Ile Thr Met Leu Val
 180 185 190
 Gly Ile Thr Gly Leu Phe Tyr Thr Gln Leu Ile Gly Ile Ile Thr Pro
 195 200 205
 Cys Ser Leu Ile Leu Lys Cys Gly Ser Val Ser Asn Asn Ser Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala	Leu Arg Ile Pro Ser	
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser	Leu Arg Val Phe Asn Ser	240
245	250	255
Val Lys Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln	Trp Ser Thr	
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Lys

<210> 3545
<211> 3657
<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 3546
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 Leu Ala Asp Pro Gly Trp Ala Ser Ile Ser Arg Gly Val Leu Val Cys
 35 40 45
 Asp Glu Cys Cys Ser Val His Arg Ser Leu Gly Arg His Ile Ser Ile
 50 55 60
 Val Lys His Leu Arg His Ser Ala Trp Pro Pro Thr Leu Leu Gln Met
 65 70 75 80
 Val His Thr Leu Ala Ser Asn Gly Ala Asn Ser Ile Trp Glu His Ser
 85 90 95
 Leu Leu Asp Pro Ala Gln Val Gln Ser Gly Arg Arg Lys Ala Asn Pro
 100 105 110
 Gln Asp Lys Val His Pro Ile Lys Ser Glu Phe Ile Arg Ala Lys Tyr
 115 120 125
 Gln Met Leu Ala Phe Val His Lys Leu Pro Cys Arg Asp Asp Asp Gly

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Val Thr Ala Lys Asp Leu Ser Lys Gln Leu His Ser Ser Val Arg Thr		
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Gly Asn Leu Glu Thr Cys Leu Arg Leu Ser Leu Gly Ala Gln Ala		160
165	170	175
Asn Phe Phe His Pro Glu Lys Gly Thr Thr Pro Leu His Val Ala Ala		
180	185	190
Lys Ala Gly Gln Thr Leu Gln Ala Glu Leu Leu Val Val Tyr Gly Ala		
195	200	205
Asp Pro Gly Ser Pro Asp Val Asn Gly Arg Thr Pro Ile Asp Tyr Ala		
210	215	220
Arg Gln Ala Gly His His Glu Leu Ala Glu Arg Leu Val Glu Cys Gln		
225	230	235
Tyr Glu Leu Thr Asp Arg Leu Ala Phe Tyr Leu Cys Gly Arg Lys Pro		240
245	250	255
Asp His Lys Asn Gly His Tyr Ile Ile Pro Gln Met Ala Asp Arg Ser		
260	265	270
Arg Gln Lys Cys Met Ser Gln Ser Leu Asp Leu Ser Glu Leu Ala Lys		
275	280	285
Ala Ala Lys Lys Lys Leu Gln Ala Leu Ser Asn Arg Leu Phe Glu Glu		
290	295	300
Leu Ala Met Asp Val Tyr Asp Glu Val Asp Arg Arg Glu Asn Asp Ala		
305	310	315
Val Trp Leu Ala Thr Gln Asn His Ser Thr Leu Val Thr Glu Arg Ser		
325	330	335
Ala Val Pro Phe Leu Pro Val Asn Pro Glu Tyr Ser Ala Thr Arg Asn		
340	345	350
Gln Gly Arg Gln Lys Leu Ala Arg Phe Asn Ala Arg Glu Phe Ala Thr		
355	360	365
Leu Ile Ile Asp Ile Leu Ser Glu Ala Lys Arg Arg Gln Gln Gly Lys		
370	375	380
Ser Leu Ser Ser Pro Thr Asp Asn Leu Glu Leu Ser Leu Arg Ser Gln		
385	390	395
Ser Asp Leu Asp Asp Gln His Asp Tyr Asp Ser Val Ala Ser Asp Glu		400
405	410	415
Asp Thr Asp Gln Glu Pro Leu Arg Ser Thr Gly Ala Thr Arg Ser Asn		
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Arg Ala Arg Ser Met Asp Ser Ser Asp Leu Ser Asp Gly Ala Val Thr		
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450	455	460
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465	470	475
Arg Arg Leu Gln Arg Glu His Phe Ala Pro Ile Ile His Lys Leu Gln		
485	490	495
Ala Glu Asn Leu Gln Leu Arg Gln Pro Pro Gly Pro Val Pro Thr Pro		
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Pro Leu Pro Ser Glu Arg Ala Glu His Thr Pro Met Ala Pro Gly Gly		
515	520	525
Ser Thr His Arg Arg Asp Arg Gln Ala Phe Ser Met Tyr Glu Pro Gly		
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Ser Ala Leu Lys Pro Phe Gly Gly Pro Pro Gly Asp Glu Leu Thr Thr		
545	550	555
Arg Leu Gln Pro Phe His Ser Thr Glu Leu Glu Asp Asp Ala Ile Tyr		560

565	570	575
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Ala Ser Ala Val Pro Phe Thr Pro Ser Ser Pro Leu	Leu Ser Cys Ser	
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Gln Glu Gly Ser Arg His Thr Ser Lys Leu Ser Arg His	Gly Ser Gly	
610	615	620
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625	630	635
Leu Glu Gly Lys Arg Phe Leu Glu Leu Gly Lys Glu Glu	Asp Phe His	
645	650	655
Pro Glu Leu Glu Ser Leu Asp Gly Asp Leu Asp Pro Gly	Leu Pro Ser	
660	665	670
Thr Glu Asp Val Ile Leu Lys Thr Glu Gln Val Thr Lys	Asn Ile Gln	
675	680	685
Glu Leu Leu Arg Ala Ala Gln Glu Phe Lys His Asp Ser	Phe Val Pro	
690	695	700
Cys Ser Glu Lys Ile His Leu Ala Val Thr Glu Met Ala Ser	Leu Phe	
705	710	715
Pro Lys Arg Pro Ala Leu Glu Pro Val Arg Ser Ser Leu	Arg Leu Leu	
725	730	735
Asn Ala Ser Ala Tyr Arg Leu Gln Ser Glu Cys Arg Lys	Thr Val Pro	
740	745	750
Pro Glu Pro Gly Ala Pro Val Asp Phe Gln Leu Leu Thr	Gln Gln Val	
755	760	765
Ile Gln Cys Ala Tyr Asp Ile Ala Lys Ala Lys Gln Leu	Val Thr	
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<210> 3547

<211> 1039

<212> DNA

<213> Homo sapiens

<400> 3547

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<210> 3548
 <211> 346
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Phe Glu Leu Met Gly Ser Ile Val Thr Glu Ile Ala Cys Gly Arg
 50 55 60
 Gln His Thr Ser Ala Phe Val Pro Ser Ser Gly Arg Ile Tyr Ser Phe
 65 70 75 80
 Gly Leu Gly Gly Asn Gly Gln Leu Gly Thr Gly Ser Thr Ser Asn Arg
 85 90 95
 Lys Ser Pro Phe Thr Val Lys Gly Asn Trp Tyr Pro Tyr Asn Gly Gln
 100 105 110
 Cys Leu Pro Asp Ile Asp Ser Glu Glu Tyr Phe Cys Val Lys Arg Ile
 115 120 125
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 130 135 140
 Cys Gly Pro Pro Asp Asp Phe Arg Cys Pro Asn Pro Thr Lys Gln Ile
 145 150 155 160
 Trp Thr Val Asn Glu Ala Leu Ile Gln Lys Trp Leu Ser Tyr Pro Ser
 165 170 175
 Gly Arg Phe Pro Val Glu Ile Ala Asn Glu Ile Asp Gly Thr Phe Ser
 180 185 190
 Ser Ser Gly Cys Leu Asn Gly Ser Phe Leu Ala Val Ser Asn Asp Asp
 195 200 205
 His Tyr Arg Thr Gly Thr Arg Phe Ser Gly Val Asp Met Asn Ala Ala
 210 215 220
 Arg Leu Leu Phe His Lys Leu Ile Gln Pro Asp His Pro Gln Ile Ser

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Gln	Gln	Val	Thr
Ala	Ala	Ser	
Leu	Glu	Lys	
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Pro	Ile	Pro	
Lys	Leu	Lys	
Leu	Thr		
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Ser	Ser	Leu	Pro
Pro	Asp	Val	Glu
Ala	Ala	Leu	Arg
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		Leu	Thr
		Pro	Leu
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Met	Ser	Asp	Asn
	Ser	Asn	Asn
		Phe	Ile
			Thr
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		Ala	Leu
		Val	Asn
		Leu	Glu
			Lys
290	295	300	
Leu	Glu	Asn	Trp
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<211> 2542

<212> DNA

<213> Homo sapiens

<400> 3549

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2040
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2160
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2280
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2340
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2400
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2542

<210> 3550
 <211> 500
 <212> PRT
 <213> Homo sapiens

<400> 3550
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 His Cys Arg Pro Ser Arg Arg Gly Arg Tyr Glu Lys Ile His Gly Arg
 35 40 45
 Ser Lys Glu Lys Glu Arg Ala Ser Leu Asp Lys Lys Arg Asp Lys Asp
 50 55 60
 Tyr Arg Arg Lys Glu Ile Leu Pro Phe Glu Lys Met Lys Glu Gln Arg
 65 70 75 80
 Leu Arg Glu His Leu Val Arg Phe Glu Arg Leu Arg Arg Ala Met Glu
 85 90 95
 Leu Arg Arg Arg Glu Ile Ala Glu Arg Glu Arg Arg Glu Arg Glu
 100 105 110
 Arg Ile Arg Ile Ile Arg Glu Arg Glu Glu Arg Glu Arg Leu Gln Arg
 115 120 125
 Glu Arg Glu Arg Leu Glu Ile Glu Arg Gln Lys Leu Glu Arg Glu Arg
 130 135 140
 Met Glu Arg Glu Arg Leu Glu Arg Glu Arg Ile Arg Ile Glu Gln Glu
 145 150 155 160
 Arg Arg Lys Glu Ala Glu Arg Ile Ala Arg Glu Arg Glu Glu Leu Arg
 165 170 175
 Arg Gln Gln Gln Leu Arg Tyr Glu Gln Glu Lys Arg Asn Ser Leu
 180 185 190
 Lys Arg Pro Arg Asp Val Asp His Arg Arg Asp Asp Pro Tyr Trp Ser
 195 200 205
 Glu Asn Lys Lys Leu Ser Leu Asp Thr Asp Ala Arg Phe Gly His Gly
 210 215 220
 Ser Asp Tyr Ser Arg Gln Gln Asn Arg Phe Asn Asp Phe Asp His Arg
 225 230 235 240
 Glu Arg Gly Arg Phe Pro Glu Ser Ser Ala Val Gln Ser Ser Ser Phe
 245 250 255
 Glu Arg Arg Asp Arg Phe Val Gly Gln Ser Glu Gly Lys Lys Ala Arg
 260 265 270
 Pro Thr Ala Arg Arg Glu Asp Pro Ser Phe Glu Arg Tyr Pro Lys Asn
 275 280 285
 Phe Ser Asp Ser Arg Arg Asn Glu Pro Pro Pro Pro Arg Asn Glu Leu
 290 295 300
 Arg Glu Ser Asp Arg Arg Glu Val Arg Gly Glu Arg Asp Glu Arg Arg
 305 310 315 320
 Thr Val Ile Ile His Asp Arg Pro Asp Ile Thr His Pro Arg His Pro
 325 330 335
 Arg Glu Ala Gly Pro Asn Pro Ser Arg Pro Thr Ser Trp Lys Ser Asp
 340 345 350
 Gly Ser Met Ser Thr Asp Lys Arg Glu Thr Arg Val Glu Arg Pro Glu
 355 360 365
 Arg Ser Gly Arg Glu Val Ser Gly His Ser Val Arg Gly Ala Pro Pro

370	375	380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg		
385	390	395
Gly Val Ile Thr Asp Arg Gly Gly Ser Gln His Tyr Pro Glu Glu		400
405	410	415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys		
420	425	430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg		
435	440	445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser		
450	455	460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser		
465	470	475
Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro		480
485	490	495
Pro Arg Arg Phe		
	500	

<210> 3551

<211> 545

<212> DNA

<213> Homo sapiens

<400> 3551

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 tttcttgtga ctggctataa attccatgca gtgctggaat gtgcttctca cagtttagt
 180
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 240
 catgggctcc agttaaattc attagtggtc cagatgtgtg tccctgtca gctggccaag
 300
 taacccact gtttatcgac aggttctcag gaatcagata gctcgcagtc ggccaagaag
 360
 360
 gacatgctgg ctgccttgaa gtccaggcag gaagctctgg agggaaacct gcgtcagagg
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 420
 ctggaggaac tgaagaagct gtgtctccga gaagctgtaa gccttccta gtcatcccg
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<210> 3552

<211> 55

<212> PRT

<213> Homo sapiens

<400> 3552

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Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu		15

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Glu Glu Thr Leu Arg Gln Arg Leu Glu Leu Lys Lys Leu Cys Leu
35 40 45

Arg Glu Ala Val Ser Leu Ser
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<210> 3553
<211> 1412
<212> DNA
<213> Homo sapiens

<400> 3553
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gatgaccagc tcaacatcct gccccatctcc tcccacgttg ccaccatgga ggcctgcct
180
ccccagactc cggatgagag tcttggctct tctgatctgg agctgaggga gttgaaggag
240
agcttcagg acacccagcc tgtgggtgtg ttggggact gctgtaagac tctagaccag
300
gccaaagctg tcttggaaatt tatcgagggc atctctgaaa agaccctgag gagtactgtt
360
gcactcacag ctgctcgagg acggggaaaa tctgcagccc tgggattggc gattgctggg
420
gcgggtggcat ttgggtactc caatatcttt gttacctccc caagccctga taacctccat
480
actctgtttg aatttgttatt taaaggattt gatgctctgc aatatcagga acatctggat
540
tatgagatta tccagtctct aaatcctgaa tttaacaaag cagtgatcat agtgaatgta
600
tttcgagaac acaggcagac tattcagtat atacatcctg cagatgctgt gaagctggc
660
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720
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780
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840
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900
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1260

gaacagaggc gtccttgcgg cagtgatttg gggaaacct gaggcatcg gaatttagtgg
 1320
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 1380
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 1412

<210> 3554
 <211> 419
 <212> PRT
 <213> Homo sapiens

<400> 3554
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 35 40 45
 Ile Ser Ser His Val Ala Thr Met Glu Ala Leu Pro Pro Gln Thr Pro
 50 55 60
 Asp Glu Ser Leu Gly Pro Ser Asp Leu Glu Leu Arg Glu Leu Lys Glu
 65 70 75 80
 Ser Leu Gln Asp Thr Gln Pro Val Gly Val Leu Val Asp Cys Cys Lys
 85 90 95
 Thr Leu Asp Gln Ala Lys Ala Val Leu Lys Phe Ile Glu Gly Ile Ser
 100 105 110
 Glu Lys Thr Leu Arg Ser Thr Val Ala Leu Thr Ala Ala Arg Gly Arg
 115 120 125
 Gly Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe
 130 135 140
 Gly Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His
 145 150 155 160
 Thr Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln
 165 170 175
 Glu His Leu Asp Tyr Glu Ile Ile Gln Ser Leu Asn Pro Glu Phe Asn
 180 185 190
 Lys Ala Val Ile Ile Val Asn Val Phe Arg Glu His Arg Gln Thr Ile
 195 200 205
 Gln Tyr Ile His Pro Ala Asp Ala Val Lys Leu Gly Gln Ala Glu Leu
 210 215 220
 Val Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Lys Ser
 225 230 235 240
 Leu Leu Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly Tyr
 245 250 255
 Glu Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu Arg
 260 265 270
 Gln Gln Ser Ala Gln Ser Gln Val Ser Thr Thr Ala Glu Asn Lys Thr
 275 280 285
 Thr Thr Thr Ala Arg Leu Ala Ser Ala Arg Thr Leu His Glu Val Ser
 290 295 300
 Leu Gln Glu Ser Ile Arg Tyr Ala Pro Gly Asp Ala Val Glu Lys Trp
 305 310 315 320
 Leu Asn Asp Leu Leu Cys Leu Asp Cys Leu Asn Ile Thr Arg Ile Val

325	330	335
Ser Gly Cys Pro Leu Pro Glu Ala Cys Glu Leu Tyr Tyr Val Asn Arg		
340	345	350
Asp Thr Leu Phe Cys Tyr His Lys Ala Ser Glu Val Phe Leu Gln Arg		
355	360	365
Leu Met Ala Leu Tyr Val Ala Ser His Tyr Lys Asn Ser Pro Asn Asp		
370	375	380
Leu Gln Met Leu Ser Asp Ala Pro Ser His His Leu Phe Cys Leu Leu		
385	390	395
Pro Pro Val Pro Pro Thr Gln Asn Ala Leu Pro Lys Val Leu Ala Val		
405	410	415
Ile Gln Val		

<210> 3555

<211> 1038

<212> DNA

<213> Homo sapiens

<400> 3555

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120 atgaaccagg cgttgcagag gcgcattcgcc aagggggtgc agtacaacat gaagatagtg
180 atccggggag acaggaacac gggcaagaca gcgcgtgtggc accgcctgca gggccggccg
240 ttcgtggagg agtacatccc cacacaggag atccaggtca ccagcatcca ctggagctac
300 aagaccacgg atgacatcgt gaaggttcaa gtctggatg tagtagacaa aggaaaatgc
360 aaaaagcgag gcgcacggctt aaagatggag aacgacccccc aggaggccga gtctgaaatg
420 gcccctggatg ctgagttcct ggacgtgtac aagaactgca acgggggtgggt catgtgttc
480 gacattacca agcagtggac cttcaattac attctccggg agttccaaa agtgcacc
540 cacgtgccag tgtgcgtgct ggggaactac cgggacatgg gcgcgcacccg agtcatcnnc
600 tgccggacgn acgtgcgtga cttcatcgac aacctggaca gacctccagg ttcctcctac
660 ttccgctatg ctgagtttc catgaagaac agttcggcc taaagtacct tcataagttc
720 ttcaatatcc cattttgca gttcagagg gagacgctgt tgccggcagct ggagacgaac
780 cagctggaca tggacgcccac gctggaggag ctgtcggtgc agcaggagac ggaggaccag
840 aactacggca tcttcctgga gatgatggag gctcgcagcc gtggccatgc gtccccactg
900 gcgccaaacg ggcagagccc atccccgggc tcccaagtcaac cagtggtgcc tgcaggcgct
960 gtgtccacgg ggagctccag ccccgccaca gcccagcccg ccccacagct gcccctcaat
1020

ggttgccccca ccatcctc
1038

<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu
20					25								30		
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile
35					40							45			
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln
50					55							60			
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val
65					70						75		80		
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val
85						90						95			
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp
100						105						110			
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala
115						120						125			
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val
130						135						140			
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg
145						150					155		160		
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn
165						170					175				
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val
180						185					190				
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe
195							200					205			
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu
210						215					220				
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu
225						230					235		240		
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu
						245					250		255		
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe
						260					265		270		
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala
						275					280		285		
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro
						290					295		300		
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro
						305					310		315		320
Ala	Pro	Gln	Leu	Pro	Leu	Asn	Gly	Cys	Pro	Thr	Ile	Leu			
						325					330				

<210> 3557

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

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 120
 agaaaacgaga gtaagtccaa aatccatgca gcacgcagcc tgagttagat cgccatcgac
 180
 ctgaccgaga cggggacgct gaagacctcg aagctggcca acatgggtag caaggggaag
 240
 atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc
 300
 attctactcc caggttctca ggaatcagat agctcgagt cggccaagaa ggacatgctg
 360
 gctgccttga agtccaggca ggaagctctg gagaaaccc tgcgtcagag gctggaggaa
 420
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 480
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<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
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Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
									25					30	
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
									40					45	
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
								55			60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
								70			75				80
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
								85			90				95
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
								100			105				110
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
								115			120				125
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
								130			135				140
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
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Leu	Asp														

<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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 120
 gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct
 180
 actttcaa at ttgaatcaac agatgaagat aaaagaaaaga aactctgtga aggcatat t
 240
 aaagtcccta taaaggacat cccacaaca tgcgtcaatgtgt cctgccttgg a gtactccgc
 300
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 360
 ctgcgtcgac tagccaagct aaatgagttt gatgattttt tggagaaagt atcagagttc
 420
 ccagttattt gggagtcatt aaaatgtctg tgcgtatata tgcgtcaacag tcagatggca
 480
 cagcagctca gcctggaaact taatcttgct gcaagctct gtaacccctt gagaaagtgc
 540
 aaggaccgga aatttatcaa tgacattaag tgcgttact tgcgttgct cttcccttctg
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 673

<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

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Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr
															30
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu
															45
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val
															60
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu
															65
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala
															85
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro
															100
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser
															115
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu
															130
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile
															135
															140

145	150	155	160
Lys Cys Phe Asp Leu Arg Leu Leu Phe	Leu Leu Ser Leu Leu His		
165	170	175	
Asp Ile Arg Ser Gln Leu Arg Tyr Glu	Leu Gln Gly Leu Pro Leu	Leu	
180	185	190	
Thr Gln Ile			
195			
<210> 3561			
<211> 523			
<212> DNA			
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<400> 3561			
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180			
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240			
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360			
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420			
aagcggaggt ttggtggttg ttttctactt tgacttctca ttgcactaaa catacaactc			
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523			
<210> 3562			
<211> 106			
<212> PRT			
<213> Homo sapiens			
<400> 3562			
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Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val			
20	25	30	
Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu			
35	40	45	
Met Glu Gly Trp Ala Gly Ser Gly Val Gly Ser Gln Thr Asp Ser			
50	55	60	
Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe			
65	70	75	80
Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp			
85	90	95	
Gly Glu Glu Glu Trp Gly Lys Gly Val Cys			
100	105		

<210> 3563

<211> 359

<212> DNA

<213> Homo sapiens

<400> 3563

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 240
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<210> 3564

<211> 82

<212> PRT

<213> Homo sapiens

<400> 3564

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															30
Ala	Phe	Val	Leu	Cys	Leu	Leu	Val	Val	Leu	Val	Leu	Leu	Met	Val	Arg
															45
Cys	Val	Arg	Ile	Leu	Leu	Asp	Pro	Tyr	Ser	Arg	Met	Pro	Ala	Ser	Ser
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Trp	Thr	Asp	His	Lys	Glu	Ala	Leu	Glu	Arg	Gly	Gln	Phe	Asp	Tyr	Ala
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Leu	Val														

<210> 3565

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3565

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 180
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 300

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 420
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 480
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<210> 3566

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3566

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									20	25				30	
Arg	Ala	Thr	Pro	Gln	Glu	Val	Gly	Arg	Thr	Ser	Ala	His	Phe	Lys	Ser
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Gln	Lys	Pro	Pro	Phe	Pro	Gly	Ala	Arg	Ala	Val	Pro	Arg	Tyr	Ala	Arg
	50					55					60				
Arg	Glu	Pro	Gly	Arg	Ala	Ala	Lys	Met	Ser	Gln	Pro	Lys	Lys	Arg	Lys
	65					70				75			80		
Leu	Glu	Ser	Gly	Gly	Ala	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	Glu	
						85			90			95			
Asp	Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Thr	Thr	Lys
								100	105				110		
Arg	Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	Tyr	Ser	Asp	Val	Ser	Val
							115		120				125		
His	Glu	Glu	Met	Ile	Ala	Asp	Arg	Val	Arg	Thr	Asp	Ala	Tyr	Arg	Trp
							130		135				140		
Val	Ser	Leu	Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	Asp
	145							150			155			160	
Val	Gly	Ala	Gly	Thr	Gly	Ile	Leu	Ser	Ile	Phe	Cys	Ala	Gln	Ala	Gly
							165		170				175		
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Arg															

<210> 3567

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 3567

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120					

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480
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1740

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<210> 3568

<211> 869

<212> PRT

<213> Homo sapiens

<400> 3568

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Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln	
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Leu	Leu	Ala	Glu	Lys	Arg	Glu	Gln	Glu	Glu	Lys	Lys	Gln	Glu	Glu		
										50					60	
Glu	Glu	Lys	Lys	Arg	Glu	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Glu		
										65					80	
Arg	Arg	Glu	Ala	Glu	Leu	Arg	Ala	Gln	Gln	Glu	Glu	Glu	Thr	Arg	Lys	

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Thr Arg Glu Leu Glu Lys Gln Lys Glu Asn Lys Gln Val Glu Glu Ile		
115	120	125
Leu Arg Leu Glu Lys Glu Ile Glu Asp Leu Gln Arg Met Lys Glu Gln		
130	135	140
Gln Glu Leu Ser Leu Thr Glu Ala Ser Leu Gln Lys Leu Gln Glu Arg		
145	150	155
Arg Asp Gln Glu Leu Arg Arg Leu Glu Glu Ala Cys Arg Ala Ala		
165	170	175
Gln Glu Phe Leu Glu Ser Leu Asn Phe Asp Glu Ile Asp Glu Cys Val		
180	185	190
Arg Asn Ile Glu Arg Ser Leu Ser Gly Gly Ser Glu Phe Ser Ser Glu		
195	200	205
Leu Ala Glu Ser Ala Cys Glu Glu Lys Pro Asn Phe Asn Phe Ser Gln		
210	215	220
Pro Tyr Pro Glu Glu Glu Val Asp Glu Gly Phe Glu Ala Asp Asp Asp		
225	230	235
Ala Phe Lys Asp Ser Pro Asn Pro Ser Glu His Gly His Ser Asp Gln		
245	250	255
Arg Thr Ser Gly Ile Arg Thr Ser Asp Asp Ser Ser Glu Glu Asp Pro		
260	265	270
Tyr Met Asn Asp Thr Val Val Pro Thr Ser Pro Ser Ala Asp Ser Thr		
275	280	285
Val Leu Leu Ala Pro Ser Val Gln Asp Ser Gly Ser Leu His Asn Ser		
290	295	300
Ser Ser Gly Glu Ser Thr Tyr Cys Met Pro Gln Asn Ala Gly Asp Leu		
305	310	315
Pro Ser Pro Asp Gly Asp Tyr Asp Tyr Asp Gln Asp Asp Tyr Glu Asp		
325	330	335
Gly Ala Ile Thr Ser Gly Ser Ser Val Thr Phe Ser Asn Ser Tyr Gly		
340	345	350
Ser Gln Trp Ser Pro Asp Tyr Arg Cys Ser Val Gly Thr Tyr Asn Ser		
355	360	365
Ser Gly Ala Tyr Arg Phe Ser Ser Glu Gly Ala Gln Ser Ser Phe Glu		
370	375	380
Asp Ser Glu Glu Asp Phe Asp Ser Arg Phe Asp Thr Asp Asp Glu Leu		
385	390	395
Ser Tyr Arg Arg Asp Ser Val Tyr Ser Cys Val Thr Leu Pro Tyr Phe		
405	410	415
His Ser Phe Leu Tyr Met Lys Gly Gly Leu Met Asn Ser Trp Lys Arg		
420	425	430
Arg Trp Cys Val Leu Lys Asp Glu Thr Phe Leu Trp Phe Arg Ser Lys		
435	440	445
Gln Glu Ala Leu Lys Gln Gly Trp Leu His Lys Lys Gly Gly Ser		
450	455	460
Ser Thr Leu Ser Arg Arg Asn Trp Lys Lys Arg Trp Phe Val Leu Arg		
465	470	475
Gln Ser Lys Leu Met Tyr Phe Glu Asn Asp Ser Glu Glu Lys Leu Lys		
485	490	495
Gly Thr Val Glu Val Arg Thr Ala Lys Glu Ile Ile Asp Asn Thr Thr		
500	505	510
Lys Glu Asn Gly Ile Asp Ile Ile Met Ala Asp Arg Thr Phe His Leu		

515	520	525
Ile Ala Glu Ser Pro Glu Asp Ala Ser Gln Trp Phe Ser Val Leu Ser		
530	535	540
Gln Val His Ala Ser Thr Asp Gln Glu Ile Gln Glu Met His Asp Glu		
545	550	555
Gln Ala Asn Pro Gln Asn Ala Val Gly Thr Leu Asp Val Gly Leu Ile		
565	570	575
Asp Ser Val Cys Ala Ser Asp Ser Pro Asp Arg Pro Asn Ser Phe Val		
580	585	590
Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu		
595	600	605
Glu Met His His Trp Ile Thr Leu Leu Gln Arg Ser Lys Gly Asp Thr		
610	615	620
Arg Val Glu Gly Gln Glu Phe Ile Val Arg Gly Trp Leu His Lys Glu		
625	630	635
Val Lys Asn Ser Pro Lys Met Ser Ser Leu Lys Leu Lys Lys Arg Trp		
645	650	655
Phe Val Leu Thr His Asn Ser Leu Asp Tyr Tyr Lys Ser Ser Glu Lys		
660	665	670
Asn Ala Leu Lys Leu Gly Thr Leu Val Leu Asn Ser Leu Cys Ser Val		
675	680	685
Val Pro Pro Asp Glu Lys Ile Phe Lys Glu Thr Gly Tyr Trp Asn Val		
690	695	700
Thr Val Tyr Gly Arg Lys His Cys Tyr Arg Leu Tyr Thr Lys Leu Leu		
705	710	715
Asn Glu Ala Thr Arg Trp Ser Ser Val Ser Gln Asn Val Thr Asp Thr		
725	730	735
Lys Ala Pro Ile Asp Thr Pro Thr Gln Gln Leu Ile Gln Asp Ile Lys		
740	745	750
Glu Asn Cys Leu Asn Ser Asp Val Val Glu Gln Ile Tyr Lys Arg Asn		
755	760	765
Pro Ile Leu Arg Tyr Thr His His Pro Leu His Ser Pro Leu Leu Pro		
770	775	780
Leu Pro Tyr Gly Asp Ile Asn Leu Asn Leu Leu Lys Asp Lys Gly Tyr		
785	790	795
Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln		
805	810	815
Leu Glu Ser Met Ser Asp Pro Ile Pro Ile Ile Gln Gly Ile Leu Gln		
820	825	830
Thr Gly His Asp Leu Arg Pro Leu Arg Asp Glu Leu Tyr Cys Gln Leu		
835	840	845
Ile Lys Gln Thr Asn Lys Val Pro His Pro Gly Ser Val Gly Asn Leu		
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Tyr Ser Trp Gln Ile		
865		

<210> 3569

<211> 5070

<212> DNA

<213> Homo sapiens

<400> 3569

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<210> 3570
 <211> 893
 <212> PRT
 <213> Homo sapiens

<400> 3570
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 Ile Lys Gln Glu Pro Gly Thr Val Thr Ala Leu Pro Leu His Pro Thr
 20 25 30
 Arg Ala Pro Ser Pro Pro Trp Pro Pro Gln Gly Pro Leu Ser Pro Gly
 35 40 45
 Pro Gly Ser Leu Pro Leu Ser Ile Ala Arg Val Gln Thr Pro Pro Trp
 50 55 60
 His Pro Pro Gly Ala Pro Ser Pro Gly Leu Leu Gln Asp Ser Asp Ser
 65 70 75 80
 Leu Ser Gly Ser Tyr Leu Asp Pro Asn Tyr Gln Ser Ile Lys Trp Gln
 85 90 95
 Pro His Gln Gln Asn Lys Trp Ala Thr Leu Tyr Asp Ala Asn Tyr Lys
 100 105 110
 Glu Leu Pro Met Leu Thr Tyr Arg Val Asp Ala Asp Lys Gly Phe Asn
 115 120 125
 Phe Ser Val Gly Asp Asp Ala Phe Val Cys Gln Lys Lys Asn His Phe
 130 135 140
 Gln Val Thr Val Tyr Ile Gly Met Leu Gly Glu Pro Lys Tyr Val Lys
 145 150 155 160
 Thr Pro Glu Gly Leu Lys Pro Leu Asp Cys Phe Tyr Leu Lys Leu His
 165 170 175
 Gly Val Lys Leu Glu Ala Leu Asn Gln Ser Ile Asn Ile Glu Gln Ser
 180 185 190
 Gln Ser Asp Arg Ser Lys Arg Pro Phe Asn Pro Val Thr Val Asn Leu
 195 200 205
 Pro Pro Glu Gln Val Thr Lys Val Thr Val Gly Arg Leu His Phe Ser
 210 215 220
 Glu Thr Thr Ala Asn Asn Met Arg Lys Lys Gly Lys Pro Asn Pro Asp
 225 230 235 240
 Gln Arg Tyr Phe Met Leu Val Val Ala Leu Gln Ala His Ala Gln Asn
 245 250 255
 Gln Asn Tyr Thr Leu Ala Ala Gln Ile Ser Glu Arg Ile Ile Val Arg
 260 265 270
 Ala Ser Asn Pro Gly Gln Phe Glu Ser Asp Ser Asp Val Leu Trp Gln
 275 280 285
 Arg Ala Gln Val Pro Asp Thr Val Phe His His Gly Arg Val Gly Ile
 290 295 300
 Asn Thr Asp Arg Pro Asp Glu Ala Leu Val Val His Gly Asn Val Lys
 305 310 315 320
 Val Met Gly Ser Leu Met His Pro Ser Asp Leu Arg Ala Lys Glu His
 325 330 335
 Val Gln Glu Val Asp Thr Thr Glu Gln Leu Lys Arg Ile Ser Arg Met

340	345	350
Arg Leu Val His Tyr Arg Tyr Lys Pro Glu Phe Ala Ala Ser Ala Gly		
355	360	365
Ile Glu Ala Thr Ala Pro Glu Thr Gly Val Ile Ala Gln Glu Val Lys		
370	375	380
Glu Ile Leu Pro Glu Ala Val Lys Asp Thr Gly Asp Met Val Phe Ala		
385	390	395
Asn Gly Lys Thr Ile Glu Asn Phe Leu Val Val Asn Lys Glu Arg Ile		
405	410	415
Phe Met Glu Asn Val Gly Ala Val Lys Glu Leu Cys Lys Leu Thr Asp		
420	425	430
Asn Leu Glu Thr Arg Ile Asp Glu Leu Glu Arg Trp Ser His Lys Leu		
435	440	445
Ala Lys Leu Arg Arg Leu Asp Ser Leu Lys Ser Thr Gly Ser Ser Gly		
450	455	460
Ala Phe Ser His Ala Gly Ser Gln Phe Ser Arg Ala Gly Ser Val Pro		
465	470	475
His Lys Lys Arg Pro Pro Lys Val Ala Ser Lys Ser Ser Ser Val Val		
485	490	495
Pro Asp Gln Ala Cys Ile Ser Gln Arg Phe Leu Gln Gly Thr Ile Ile		
500	505	510
Ala Leu Val Val Val Met Ala Phe Ser Val Val Ser Met Ser Thr Leu		
515	520	525
Tyr Val Leu Ser Leu Arg Thr Glu Glu Asp Leu Val Asp Thr Asp Gly		
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Ser Phe Ala Val Ser Thr Ser Cys Leu Leu Ala Leu Leu Arg Pro Gln		
545	550	555
Pro Pro Gly Gly Ser Glu Ala Leu Cys Pro Trp Ser Ser Gln Ser Phe		
565	570	575
Gly Thr Thr Gln Leu Arg Gln Ser Pro Leu Thr Thr Gly Leu Pro Gly		
580	585	590
Ile Gln Pro Ser Leu Leu Val Thr Thr Ser Leu Thr Ser Ser Ala		
595	600	605
Pro Gly Ser Ala Val Arg Thr Leu Asp Met Cys Ser Ser His Pro Cys		
610	615	620
Pro Val Ile Cys Cys Ser Ser Pro Thr Thr Asn Pro Thr Thr Gly Pro		
625	630	635
Ser Leu Gly Pro Ser Phe Asn Pro Gly His Val Leu Ser Pro Ser Pro		
645	650	655
Ser Pro Ser Thr Asn Arg Ser Gly Pro Ser Gln Met Ala Leu Leu Pro		
660	665	670
Val Thr Asn Ile Arg Ala Lys Ser Trp Gly Leu Ser Val Asn Gly Ile		
675	680	685
Asp His Ser Lys His His Lys Ser Leu Glu Pro Leu Ala Ser Pro Ala		
690	695	700
Val Pro Phe Pro Gly Gly Gln Gly Lys Ala Lys Asn Ser Pro Ser Leu		
705	710	715
Gly Phe His Gly Arg Ala Arg Arg Gly Ala Leu Gln Ser Ser Val Gly		
725	730	735
Pro Ala Glu Pro Thr Trp Ala Gln Gly Gln Ser Ala Ser Leu Leu Ala		
740	745	750
Glu Pro Val Pro Ser Leu Thr Ser Ile Gln Val Leu Glu Asn Ser Met		
755	760	765
Ser Ile Thr Ser Gln Tyr Cys Ala Pro Gly Asp Ala Cys Arg Pro Gly		

770	775	780
Asn Phe Thr Tyr His Ile Pro Val Ser Ser Gly	Thr Pro Leu His Leu	
785 790 795 800		
Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu		
805 810 815		
Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro		
820 825 830		
Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp		
835 840 845		
Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val		
850 855 860		
Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro		
865 870 875 880		
Ala Thr Asp Tyr His Phe His Phe Tyr Arg Leu Cys Asp		
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<210> 3571

<211> 528

<212> DNA

<213> Homo sapiens

<400> 3571

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420
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<210> 3572

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3572

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20 25 30			
Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu			
35 40 45			
Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His			

50	55	60	
Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro			
65	70	75	80
Ala Leu Leu Pro Gln Val Ser Thr Gln Val Ala Gln Ala Ala Leu Arg			
85	90	95	
Thr Ala Leu Pro Arg Ala Ser Arg Leu Leu Leu Gly Gly Cys			
100	105	110	

<210> 3573

<211> 1236

<212> DNA

<213> Homo sapiens

<400> 3573

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 120
 ccctgcctgc tcoccaaagc ccagcctca gccccccaa tcaatccag ccacacacac
 180
 agtcccattt ttccatcca ttctggtaact tgtgtgttca ataaaacctgg tggacacaca
 240
 gcttcacata cccacacact cacagccaca aacccagaa gtcatgcaca tgccgacgca
 300
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 360
 tgcatagaag caagtctctg gacccttct gcacccaca gagggggctc ccctgctgt
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 1020
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 1140
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 1200

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1236

<210> 3574
<211> 361
<212> PRT
<213> Homo sapiens

<400> 3574

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								25				30			
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
	35						40				45				
Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
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Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
65					70				75				80		
Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
	85					90					95				
Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
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Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
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Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
	130				135					140					
Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
145					150				155			160			
Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
	165					170				175					
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
	180					185				190					
Arg	Leu	Arg	Ala	Gly	Thr	Gln	Ser	Cys	Leu	Cys	Ile	Leu	Ser	His	Leu
	195					200				205					
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
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Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu	Leu	Leu	Gln	Asn	Leu
225					230				235			240			
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
	245					250				255					
Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
	260				265					270					
Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
	275					280				285					
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290				295					300					
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310				315			320			
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
	325					330				335					
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
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355

360

<210> 3575
<211> 769
<212> DNA
<213> Homo sapiens

<400> 3575
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120
cagtcaaagg tgctggagtt gtgtctgtat agaagtaagt cgtccacca acagtttcct
180
tttggatcac ctgaccagaa gacggagtct gagaacagg attattaaca gatgttagagg
240
caactagaagg caccatgtaa cttgctggat ttggagtgatg acttcttctt ctgggagcag
300
gagaagttatg tggagtaatc ttggggaaat gaagagggga agacccagca gacaacgaca
360
ttcctgaaga ggatgtaaaa atgtttctta atggagcaat aattggttt agagaacaag
420
tctggaaaat aaaatgcataa cattcatttg gaagaaacat catcttggg atcgtaagt
480
caaagatgaa gggaaataatt ttatcttgtt ttgttgtaga aaaagctctg attaaagcaa
540
atgtaaagtt tctttttca aatgtactta tttccaaata tgtagcaga tttactgcaa
600
gaatagtctc ctccatatca aggtttacat cagggaaattt aatagcaaga gtgaccaaaa
660
attnataaaa ttaatgaaag agtggaaagt aacagaattt tggctcttta taaaattatg
720
cctttataaa aagttttctt tttataaaag gcataattcc ttttttatt
769

<210> 3576
<211> 205
<212> PRT
<213> Homo sapiens

<400> 3576
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20 25 30
Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr
35 40 45
Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe
50 55 60
Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe
65 70 75 80
Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His
85 90 95
Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Ser

100	105	110
His Thr Pro Asn Pro Ala Ser Tyr Met Val Pro Ser Ser Ala Ser Thr		
115	120	125
Ser Val Asn Asn Pro Val Ser Gln Thr Pro Ser Ser Gly Gln Val Ile		
130	135	140
Gln Lys Glu Thr Val Gly Gly Thr Thr Tyr Phe Tyr Thr Asp Thr Thr		
145	150	155
Pro Ala Pro Leu Thr Gly Met Val Phe Pro Asn Tyr His Ile Tyr Pro		
165	170	175
Pro Thr Ala Pro His Val Ala Tyr Met Gln Pro Lys Ala Asn Ala Pro		
180	185	190
Ser Phe Phe Met Ala Asp Glu Leu Arg Gln Glu Leu Ile		
195	200	205

<210> 3577

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3577

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 120
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 480
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 720
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 780
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 900
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 960
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 1020

agtgctaagg tacttgaaaa ctcacttgag cccgggttagg ctgtgttggc cctcaacttgg
 1080
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 1200
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<210> 3578
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 3578
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 20 25 30
 Ile Ser Glu His Phe His Pro Thr Val Ile Gly Glu Ser Met Tyr Gly
 35 40 45
 Asp Phe Glu Glu Ala Phe Asp His Leu Gln Asn Arg Leu Ile Ala Thr
 50 55 60
 Lys Asn Pro Glu Glu Ile Arg Gly Gly Leu Leu Lys Tyr Ser Asn
 65 70 75 80
 Leu Leu Val Arg Asp Phe Arg Pro Thr Asp Gln Glu Glu Ile Lys Thr
 85 90 95
 Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro Asp Ile
 100 105 110
 Leu Glu Gln Gln Arg Lys Leu Glu Thr Tyr Leu Gln Asn His Phe Ala
 115 120 125
 Glu Glu Glu Arg Ser Lys Tyr Asp Tyr Leu Met Ile Leu Arg Arg Val
 130 135 140
 Val Asn Glu Ser Thr Val Cys Leu Met Gly His Glu Arg Arg Gln Thr
 145 150 155 160
 Leu Asn Leu Ile Ser Leu Leu Ala Leu Arg Val Leu Gly Gly Thr Lys
 165 170 175
 His His Pro Pro Val Pro Pro Arg Ser Pro Val Thr Thr Ser Gly Pro
 180 185 190
 Leu Ser Gln
 195

<210> 3579
 <211> 755
 <212> DNA
 <213> Homo sapiens

<400> 3579
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 240
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 420
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 480
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 aatggtaaat atatgcttta agctctacct taaaacttgt atgttattca ggcacatctt
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<210> 3580
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 3580
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 Glu Thr Lys Gln His Glu Lys Trp Leu Ser Gln Pro Thr Cys Ser Asp
 35 40 45
 Met Pro Arg Asn Phe Ser Ser Gly Pro Gly Ser Gly Gly Leu Leu Ile
 50 55 60
 Phe Ser Gln Asp Ile Val Leu Ser Trp Asn Leu Ala Gly Gly Trp Ser
 65 70 75 80
 Ile Cys Ile Trp Ser Ile Ala Arg Leu Ser His Leu Ser Ser Asp Gln
 85 90 95
 Lys Cys Ile Ser Lys Ile Ile Thr Ser Thr Lys Thr Ile Ile Asp Cys
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 Glu Gln Thr Phe Ser Val Thr Ser Arg
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<210> 3581
 <211> 2132
 <212> DNA
 <213> Homo sapiens

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ggcgccctgct ggacttgtac tcggcggcg agcagcgcgt gtacgaggcg cgggaccgcg
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240
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 Glu Glu Gln Lys Met Arg Pro Glu Ile Ala Gly Leu Lys Pro Ala Asn

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<211> 3148

<212> DNA

<213> Homo sapiens

<400> 3587

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<400> 3588

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Ser	Leu	Asp	Lys	Cys	Lys	Asn	Asn	Glu	Asn	Leu	Gln	Gln	Ile	Leu	Thr
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Asn	Ala	Thr	Ile	Met	Val	Val	Ser	Val	Thr	Ala	Ser	Thr	Thr	Gln	Gly
									165						170
Gln	Gln	Leu	Ser	Glu	Glu	Glu	Glu	Arg	Leu	Glu	Glu	Ala	Cys	Asp	

180	185	190
Met Ala Leu Glu Leu Asn Ala Ser Lys His Arg Ile Tyr	Glu Tyr Val	
195	200	205
Glu Ser Arg Met Ser Phe Ile Ala Pro Asn Leu Ser Ile	Ile Ile Gly	
210	215	220
Ala Ser Thr Ala Ala Lys Ile Met Gly Val Ala Gly	Gly Leu Thr Asn	
225	230	235
Leu Ser Lys Met Pro Ala Cys Asn Ile Met Leu Leu Gly	Ala Gln Arg	
245	250	255
Lys Thr Leu Ser Gly Phe Ser Ser Thr Ser Val Leu Pro	His Thr Gly	
260	265	270
Tyr Ile Tyr His Ser Asp Ile Val Gln Ser Leu Pro	Pro Asp Leu Arg	
275	280	285
Arg Lys Ala Ala Arg Leu Val Ala Ala Lys Cys Thr	Leu Ala Ala Arg	
290	295	300
Val Asp Ser Phe His Glu Ser Thr Glu Gly Lys Val	Gly Tyr Glu Leu	
305	310	315
Lys Asp Glu Ile Glu Arg Lys Phe Asp Lys Trp Gln	Glu Pro Pro Pro	
325	330	335
Val Lys Gln Val Lys Pro Leu Pro Ala Pro Leu Asp	Gly Gln Arg Lys	
340	345	350
Lys Arg Gly Gly Arg Arg Tyr Arg Lys Met Lys Glu	Arg Leu Gly Leu	
355	360	365
Thr Glu Ile Arg Lys Gln Ala Asn Arg Met Ser Phe	Gly Glu Ile Glu	
370	375	380
Glu Asp Ala Tyr Gln Glu Asp Leu Gly Phe Ser	Leu Gly His Leu Gly	
385	390	395
Lys Ser Gly Ser Gly Arg Val Arg Gln Thr Gln Val	Asn Glu Ala Thr	
405	410	415
Lys Ala Arg Ile Ser Lys Thr Leu Gln Arg Thr	Leu Gln Lys Gln Ser	
420	425	430
Val Val Tyr Gly Gly Lys Ser Thr Ile Arg Asp Arg	Ser Ser Gly Thr	
435	440	445
Ala Ser Ser Val Ala Phe Thr Pro Leu Gln Gly	Leu Glu Ile Val Asn	
450	455	460
Pro Gln Ala Ala Glu Lys Lys Val Ala Glu Ala Asn	Gln Lys Tyr Phe	
465	470	475
Ser Ser Met Ala Glu Phe Leu Lys Val Lys Gly	Glu Lys Ser Gly Leu	
485	490	495
Met Ser Thr		

<210> 3589
<211> 675
<212> DNA
<213> Homo sapiens

<400> 3589
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catgaaatcg aaggctatgg ttatgggtgg aacaggaaca agcagaggca acttcctgag
120
aatagttctt gaccctaggta cctccatgaa cctcgaagct gaccctaggca tagggggat
180

accttcattt cagtcccagc agcctccccc aaccagtcag ggtccctgaa gagcatctgg
 240
 ctctccacaa gacaatagac aggaagggaa cccagtgccc cccccaagct tagctaatgt
 300
 gagtgaagaa ccagggcagaa cccaggcagc agatggata ggagttcca agccagtgt
 360
 tggggatagg ccctcccaat tcagaaaaca agcaaggccc tggccacagc caggaaggat
 420
 tgtaagggcc ttccctgagca gacacaaagg agccctgagc tgctgggggt gatgaggagc
 480
 ggagggcaggg ccagggcagag ggtctgcaaa gaattacact ggaaaggtgg aagggggaca
 540
 ttgggtcttag tgggttgcc tgtggagagc tgtcaggaga ggggaggatg aggttggtgg
 600
 agacgcctga ggcaagggtg tttgggggtc ttgttggcag catggtggca aaaggctcca
 660
 gagcagcca cgct
 675

<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

Met	Leu	Pro	Thr	Arg	Pro	Pro	Asn	Thr	Leu	Ala	Ser	Gly	Val	Ser	Thr
1									10					15	
Asn	Leu	Ile	Leu	Pro	Ser	Pro	Asp	Ser	Ser	Pro	Gln	Ala	Lys	Pro	Leu
									25					30	
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
									40					45	
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
									55					60	
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
									70					75	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
									85					90	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
									100					105	
Phe	Thr	His	Ile	Ser											110
															115

<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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 60
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 120
 cgatggtctt catcagggtt gattcctaataaaaaataac gaaatattgg aatctcagct
 180

cacattgatt ctggggaaaac tacattaaca gaacgagtcc tttactacac tggcagaatt
 240
 gcaaagatgc atgaggtgaa aggtaaagat ggagttggtg ctgtcatgga ttccatgaa
 300
 ctagagagac aaagaggaat cactattcg tcagcagcca cttacaccat gtggaaagat
 360
 gtcaaatatta acattataga tactcctggg catgtggact tcacaataga agtggaaagg
 420
 gcctgagag tggtggatgg tgcagtcctt gttctctgtg ctgttggagg ggtacagtgc
 480
 cagaccatga ctgtcaatcg tcagatgaag cgctacaacg ttccgttct aactttatt
 540
 aacaaattgg accgaatggg ctccaaacca gccagggccc tgccagcaaat gaggtctaaa
 600
 ctaaatcata atgcagcggtt tatgcagata cccatgggtt tggagggtaa ttttaaaggt
 660
 atttagat
 669

<210> 3592
 <211> 223
 <212> PRT
 <213> Homo sapiens

<400> 3592
 Xaa Ala Cys Ser Ala Leu Ala Met Arg Leu Leu Gly Ala Ala Ala Val
 1 5 10 15
 Ala Ala Leu Gly Arg Gly Arg Ala Pro Ala Ser Leu Gly Trp Gln Arg
 20 25 30
 Lys Gln Val Asn Trp Lys Ala Cys Arg Trp Ser Ser Ser Gly Val Ile
 35 40 45
 Pro Asn Glu Lys Ile Arg Asn Ile Gly Ile Ser Ala His Ile Asp Ser
 50 55 60
 Gly Lys Thr Thr Leu Thr Glu Arg Val Leu Tyr Tyr Thr Gly Arg Ile
 65 70 75 80
 Ala Lys Met His Glu Val Lys Gly Lys Asp Gly Val Gly Ala Val Met
 85 90 95
 Asp Ser Met Glu Leu Glu Arg Gln Arg Gly Ile Thr Ile Gln Ser Ala
 100 105 110
 Ala Thr Tyr Thr Met Trp Lys Asp Val Asn Ile Asn Ile Ile Asp Thr
 115 120 125
 Pro Gly His Val Asp Phe Thr Ile Glu Val Glu Arg Ala Leu Arg Val
 130 135 140
 Leu Asp Gly Ala Val Leu Val Leu Cys Ala Val Gly Gly Val Gln Cys
 145 150 155 160
 Gln Thr Met Thr Val Asn Arg Gln Met Lys Arg Tyr Asn Val Pro Phe
 165 170 175
 Leu Thr Phe Ile Asn Lys Leu Asp Arg Met Gly Ser Asn Pro Ala Arg
 180 185 190
 Ala Leu Gln Gln Met Arg Ser Lys Leu Asn His Asn Ala Ala Phe Met
 195 200 205
 Gln Ile Pro Met Gly Leu Glu Gly Asn Phe Lys Gly Ile Val Asp
 210 215 220

<210> 3593
<211> 1005
<212> DNA
<213> Homo sapiens

<400> 3593
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60
cggttcgaga ggctctgggc cggcagtcta agctctcgca gcctggctct tgcagccgca
120
ccctcaagca acggatcccc atggcgcttg ttgggcgcgt tgtgcctgca gcggccacct
180
gtagtctcca agccgttgac cccattgcag gaagagatgg cgtctctact gcagcagatt
240
gagatagaga gaagcctgta ttcagaccac gagcttcgtg ctctggatga aaaccagcga
300
360
ctggcaaaga agaaagctga cttcatgtat gaagaagatg aacaggatat attgctggcg
420
caagatttgg aagatatgtg ggagcagaaa tttctacagt tcaaacttgg agctcgcata
480
acaagaagctg atgaaaagaa tgaccgaaca tccctgaaca ggaagctaga caggaacatt
540
gtcctgttag tcagagagaa gtttggagac caggatgtt ggatactgcc ccagggcagag
600
tggcagcctg gggagaccct tcgaggaaca gctgaaccaa ccctggccac actctcagaa
660
aacaacatgg aagccaagtt cctaggaaat gcaccctgtg ggcaactacac attcaagttc
720
ccccaggcaa tgcggacaga gagtaacctc ggagccaagg tttttttttt caaaggactg
780
ctattaactg gagactttc ccaggctggg aataaggccc atcatgtgtg ggtcaactaag
840
gatgagctgg gtgactattt gaaaccaaaaa tacctggccc aagtttaggag gtttggggca
900
gacctctgat gggccgagct gcctgtggac ggtgctcaga caagtctggg attagggcct
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caaggacatt gtgtgattgc ctcacattt caggtaatat caagcagcaa actaaattct
1005
gagaaataaaa cgagtctatt actgaaaaaaaaaaaaaaaaaaaa

<210> 3594
<211> 282
<212> PRT
<213> Homo sapiens

<400> 3594
Glu Arg Lys Met Ala Ala Pro Val Arg Arg Thr Leu Leu Gly Val Ala
1 5 10 15
Gly Gly Trp Arg Arg Phe Glu Arg Leu Trp Ala Gly Ser Leu Ser Ser
20 25 30
Arg Ser Leu Ala Leu Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp
35 40 45
Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50	55	60														
Pro	Leu	Thr	Pro	Leu	Gln	Glu	Glu	Met	Ala	Ser	Leu	Leu	Gln	Gln	Ile	
65					70					75						80
Glu	Ile	Glu	Arg	Ser	Leu	Tyr	Ser	Asp	His	Glu	Leu	Arg	Ala	Leu	Asp	
										85					95	
Glu	Asn	Gln	Arg	Leu	Ala	Lys	Lys	Ala	Asp	Leu	His	Asp	Glu	Glu		
						100				105					110	
Asp	Glu	Gln	Asp	Ile	Leu	Leu	Ala	Gln	Asp	Leu	Glu	Asp	Met	Trp	Glu	
										115					125	
Gln	Lys	Phe	Leu	Gln	Phe	Lys	Leu	Gly	Ala	Arg	Ile	Thr	Glu	Ala	Asp	
										130					140	
Glu	Lys	Asn	Asp	Arg	Thr	Ser	Leu	Asn	Arg	Lys	Leu	Asp	Arg	Asn	Leu	
										145					160	
Val	Leu	Leu	Val	Arg	Glu	Lys	Phe	Gly	Asp	Gln	Asp	Val	Trp	Ile	Leu	
										165					175	
Pro	Gln	Ala	Glu	Trp	Gln	Pro	Gly	Glu	Thr	Leu	Arg	Gly	Thr	Ala	Glu	
										180					190	
Arg	Thr	Leu	Ala	Thr	Leu	Ser	Glu	Asn	Asn	Met	Glu	Ala	Lys	Phe	Leu	
										195					205	
Gly	Asn	Ala	Pro	Cys	Gly	His	Tyr	Thr	Phe	Lys	Phe	Pro	Gln	Ala	Met	
										210					220	
Arg	Thr	Glu	Ser	Asn	Leu	Gly	Ala	Lys	Val	Phe	Phe	Phe	Lys	Ala	Leu	
										225					240	
Leu	Leu	Thr	Gly	Asp	Phe	Ser	Gln	Ala	Gly	Asn	Lys	Gly	His	His	Val	
										245					255	
Trp	Val	Thr	Lys	Asp	Glu	Leu	Gly	Asp	Tyr	Leu	Lys	Pro	Lys	Tyr	Leu	
										260					270	
Ala	Gln	Val	Arg	Arg	Phe	Val	Ser	Asp	Leu							
										275					280	

<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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120
agttcacccc agggctccat cgaggcccac aagaggggct cccgcttctg gatccaggac
180
aaaggccccca tcgtggagag ttacatcggg ttcatcgaga gctaccgcga cccctttgg
240
tcccgaggag aatttgaagg tttcgtagct gtggtaaca aggccatgag tgccaagtt
300
gagcggctgg tggcgagcgc agagcagctg ctgaaggagc tgccctggcc cccaacctt
360
gagaaggaca agttcctcac ccctgacttc acctccctgg atgttctcac ttccgctggc
420
tccggcatcc ctgcccggcat caacatcccc aactacgatg atctgaggca gacggaaggc
480
tttaagaacg tgtcgctggg gaatgtgctg gctgtggcct acgcccacgca gcgggagaag
540

cttaccttc tggaggagga tgacaaggac ctgtacatcc tctggaaggg gccctccttc
600
gatgtgcagg tgggcctgca cgagctgctg ggccatggca gtggcaagct ctctgtacag
660
gacaaaaag gagcattcaa ctttgaccag gaaacagtga tcaacccaga gacgggcgag
720
cagattcaga gctggtatcg gagcggggag acctgggata gcaagttcag caccatcgcc
780
tccagctacg aagagtgccg ggctgagagc gtgggtctct acctctgtct ccacccgcaa
840
gtgctggaga tctttggct tgagggggct gatgcggagg acgtgatcta cgtgaactgg
900
ctcaacatgg ttcgggcgg gctgctcgct ctggagttct acacacctga ggccttcaac
960
tggcgacagg cccatatgca ggcccggtt gtgatectga gagtcttgct ggaggctggc
1020
gagggactcg ttaccatcac tcccaccaca ggctccgatg ggcgcccaga tgcccggtc
1080
cgccctcgacc gcagcaagat ccggctgtg ggcaagcctg ctctagagcg cttcctgcgg
1140
agacttcagg tgctgaagtc cacagggat gtggccggag ggcgggcccgt gtacgagggg
1200
tatgcaacgg tcactgatgc gccccccgag tgcttcctca ccctcaggga cacggtgctg
1260
ctgcgttaagg aatctcgaa gtcattgtt cagccaaaca ctcgccttga aggtaatggc
1320
tcagacgtgc agcttctgga atacgaggcg tcagctgctg gcctcatccg atccttctct
1380
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1620
gtgnacacaa cccattccat ttgtcagcac tttccagcct gccaatttgtt tcccctctgt
1680
gatcatttca tctgcactgc catacgtgga gtgagcaaga caggcattac catcctgtct
1740
accagatgag gaaatggcag ttctgagaag tcactggtct agatcccgca ggtggcacgt
1800
gacagctagg gttcaaaaacg ttctcaccaa atccaatgtct cctcacatata taatttata
1860
accagacaaa taaatattag agacaaccac catcaaaaaaa aaa
1903

<210> 3596
<211> 496
<212> PRT
<213> Homo sapiens

<400> 3596
Phe Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val

1	5	10	15												
Glu	Gln	Leu	Glu	Lys	Ala	Lys	Ala	Tyr	Ala	Ala	Asn	Ser	His	Gln	Gly
20			25											30	
Gln	Met	Leu	Ala	Gln	Tyr	Ile	Glu	Ser	Phe	Thr	Gln	Gly	Ser	Ile	Glu
35				40									45		
Ala	His	Lys	Arg	Gly	Ser	Arg	Phe	Trp	Ile	Gln	Asp	Lys	Gly	Pro	Ile
50				55							60				
Val	Glu	Ser	Tyr	Ile	Gly	Phe	Ile	Glu	Ser	Tyr	Arg	Asp	Pro	Phe	Gly
65				70					75			80			
Ser	Arg	Gly	Glu	Phe	Gly	Phe	Val	Ala	Val	Val	Asn	Lys	Ala	Met	
85					90						95				
Ser	Ala	Lys	Phe	Glu	Arg	Leu	Val	Ala	Ser	Ala	Glu	Gln	Leu	Leu	Lys
100					105								110		
Glu	Leu	Pro	Trp	Pro	Pro	Thr	Phe	Glu	Lys	Asp	Lys	Phe	Leu	Thr	Pro
115					120							125			
Asp	Phe	Thr	Ser	Leu	Asp	Val	Leu	Thr	Phe	Ala	Gly	Ser	Gly	Ile	Pro
130					135						140				
Ala	Gly	Ile	Asn	Ile	Pro	Asn	Tyr	Asp	Asp	Leu	Arg	Gln	Thr	Glu	Gly
145					150					155			160		
Phe	Lys	Asn	Val	Ser	Leu	Gly	Asn	Val	Leu	Ala	Val	Ala	Tyr	Ala	Thr
165						170					175				
Gln	Arg	Glu	Lys	Leu	Thr	Phe	Leu	Glu	Glu	Asp	Asp	Lys	Asp	Leu	Tyr
180					185						190				
Ile	Leu	Trp	Lys	Gly	Pro	Ser	Phe	Asp	Val	Gln	Val	Gly	Leu	His	Glu
195						200					205				
Leu	Leu	Gly	His	Gly	Ser	Gly	Lys	Leu	Phe	Val	Gln	Asp	Glu	Lys	Gly
210					215					220					
Ala	Phe	Asn	Phe	Asp	Gln	Glu	Thr	Val	Ile	Asn	Pro	Glu	Thr	Gly	Glu
225					230					235			240		
Gln	Ile	Gln	Ser	Trp	Tyr	Arg	Ser	Gly	Glu	Thr	Trp	Asp	Ser	Lys	Phe
245						250					255				
Ser	Thr	Ile	Ala	Ser	Ser	Tyr	Glu	Glu	Cys	Arg	Ala	Glu	Ser	Val	Gly
260					265						270				
Leu	Tyr	Leu	Cys	Leu	His	Pro	Gln	Val	Leu	Glu	Ile	Phe	Gly	Phe	Glu
275					280						285				
Gly	Ala	Asp	Ala	Glu	Asp	Val	Ile	Tyr	Val	Asn	Trp	Leu	Asn	Met	Val
290					295					300					
Arg	Ala	Gly	Leu	Leu	Ala	Leu	Glu	Phe	Tyr	Thr	Pro	Glu	Ala	Phe	Asn
305					310					315			320		
Trp	Arg	Gln	Ala	His	Met	Gln	Ala	Arg	Phe	Val	Ile	Leu	Arg	Val	Leu
325					330					335					
Leu	Glu	Ala	Gly	Glu	Leu	Val	Thr	Ile	Thr	Pro	Thr	Thr	Gly	Ser	
340					345						350				
Asp	Gly	Arg	Pro	Asp	Ala	Arg	Val	Arg	Leu	Asp	Arg	Ser	Lys	Ile	Arg
355					360						365				
Ser	Val	Gly	Lys	Pro	Ala	Leu	Glu	Arg	Phe	Leu	Arg	Arg	Leu	Gln	Val
370					375					380					
Leu	Lys	Ser	Thr	Gly	Asp	Val	Ala	Gly	Gly	Arg	Ala	Leu	Tyr	Glu	Gly
385					390					395			400		
Tyr	Ala	Thr	Val	Thr	Asp	Ala	Pro	Pro	Glu	Cys	Phe	Leu	Thr	Leu	Arg
405					410						415				
Asp	Thr	Val	Leu	Leu	Arg	Lys	Glu	Ser	Arg	Lys	Leu	Ile	Val	Gln	Pro
420					425						430				
Asn	Thr	Arg	Leu	Glu	Gly	Asn	Gly	Ser	Asp	Val	Gln	Leu	Leu	Glu	Tyr

435	440	445
Glu Ala Ser Ala Ala Gly Leu Ile Arg Ser Phe Ser Glu Arg Phe Pro		
450	455	460
Glu Asp Gly Pro Glu Leu Glu Glu Ile Leu Thr Gln Leu Ala Thr Ala		
465	470	475
Asp Ala Arg Phe Trp Lys Gly Pro Ser Glu Ala Pro Ser Gly Gln Ala		
485	490	495

<210> 3597

<211> 1090

<212> DNA

<213> Homo sapiens

<400> 3597

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 agatgggtgg aggcagtaac agagaagaat tttgaaacaa aagattttcg agcctctcta
 120
 gaaaatggtg ttctgctgtg tgatttgatt aataagctt aacctggcgt cattaagaag
 180
 atcaatagac tgtctacacc aatagcagga ttggataata taaacgtttt cttgaaagct
 240
 tgtgaacaga ttggattgaa agaagcccag ctttccatc ctggagatct acaggattta
 300
 tcaaattcgag tcactgtcaa gcaagaagag actgacagga gagtaaaaaa tgttttgata
 360
 acattgtact ggctggaaag aaaagcacaa agcaaccgt actataatgg tccccatctt
 420
 aatttggaaag cgtttgagaa tcttttagga caagcactga cgaaggcact cgaagactcc
 480
 agcttcctga aaagaagtgg cagggacagt ggctacggtg acatctggtg tcctgaacgt
 540
 ggagaatttc ttgctccctcc aaggcaccat aagagagaag attccttga aagcttggac
 600
 tctttggct cgaggtcatt gacaagctgc tcctctgata tcacgttgag agggggcgt
 660
 gaaggttttg aaagtgcac agattcggaa tttacattca agatgcagga ttataataaa
 720
 gatgatatgt cgtatcgaa gattcggct gttgagccaa agactgcgtt acccttcaat
 780
 cgtttttac ccaacaaaag tagacagcca tcctatgtac cagcacctct gagaaagaaa
 840
 aagccagaca aacatgagga taacagaaga agttggccaa gcccggtta tacagaagca
 900
 gatggaacat ttcaaggag taagtccatg agtgatgtca gcgcagaaga tggtaaaaac
 960
 ttgcgtcagc tgcgttacga ggagatgcag aaaataaaat cacaattaaa agaacaagat
 1020
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 1080
 ctgcagaaga
 1090

<210> 3598

<211> 159
<212> PRT
<213> Homo sapiens

<400> 3598

Arg	Ser	Leu	Thr	Ser	Cys	Ser	Ser	Asp	Ile	Thr	Leu	Arg	Gly	Gly	Arg
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Glu	Gly	Phe	Glu	Ser	Asp	Thr	Asp	Ser	Glu	Phe	Thr	Phe	Lys	Met	Gln
20	.	25	.	25	.	30
Asp	Tyr	Asn	Lys	Asp	Asp	Met	Ser	Tyr	Arg	Arg	Ile	Ser	Ala	Val	Glu
35	.	40	.	40	.	45	.	.	.	.	.	.	.	.	45
Pro	Lys	Thr	Ala	Leu	Pro	Phe	Asn	Arg	Phe	Leu	Pro	Asn	Lys	Ser	Arg
50	.	55	.	55	.	60	.	.	.	.	.	.	.	.	.
Gln	Pro	Ser	Tyr	Val	Pro	Ala	Pro	Leu	Arg	Lys	Lys	Lys	Pro	Asp	Lys
65	.	70	.	75	.	80	.	.	.	.	.	.	.	.	.
His	Glu	Asp	Asn	Arg	Arg	Ser	Trp	Ala	Ser	Pro	Val	Tyr	Thr	Glu	Ala
85	.	90	.	95	.	.	.	.	.	.	.	.	.	.	.
Asp	Gly	Thr	Phe	Ser	Arg	Ser	Lys	Ser	Met	Ser	Asp	Val	Ser	Ala	Glu
100	.	105	.	105	.	110	.	.	.	.	.	.	.	.	.
Asp	Val	Gln	Asn	Leu	Arg	Gln	Leu	Arg	Tyr	Glu	Glu	Met	Gln	Lys	Ile
115	.	120	.	120	.	125	.	.	.	.	.	.	.	.	.
Lys	Ser	Gln	Leu	Lys	Glu	Gln	Asp	Gln	Lys	Trp	Gln	Asp	Asp	Leu	Ala
130	.	135	.	135	.	140
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145	.	150	.	150	.	155

<210> 3599
<211> 691
<212> DNA
<213> Homo sapiens

<400> 3599

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60
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120
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<210> 3600
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 3600
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 35 40 45
 Pro Arg Pro Leu Ser Val Pro Ile Glu His Leu Leu Gly Ala Lys Asn
 50 55 60
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 Leu Leu

<210> 3601
 <211> 2963
 <212> DNA
 <213> Homo sapiens

<400> 3601
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 2963

<210> 3602
 <211> 299
 <212> PRT
 <213> Homo sapiens

<400> 3602
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 Glu Ala Arg Glu Leu Met Tyr Ser Gly Ala Leu Leu Phe Phe Ser His
 35 40 45
 Gly Gln Gln Asn Ser Ala Ala Asp Leu Ser Met Leu Val Leu Glu Ser
 50 55 60
 Leu Glu Lys Ala Glu Val Glu Val Ala Asp Glu Leu Leu Glu Asn Leu
 65 70 75 80
 Ala Lys Val Phe Ser Leu Met Asp Pro Asn Ser Pro Glu Arg Val Thr
 85 90 95
 Phe Val Ser Arg Ala Leu Lys Trp Ser Ser Gly Gly Ser Gly Lys Leu
 100 105 110
 Gly His Pro Arg Leu His Gln Leu Leu Ala Leu Thr Leu Trp Lys Glu
 115 120 125
 Gln Asn Tyr Cys Glu Ser Arg Tyr His Phe Leu His Ser Ala Asp Gly
 130 135 140
 Glu Gly Cys Ala Asn Met Leu Val Glu Tyr Ser Thr Ser Arg Gly Phe
 145 150 155 160
 Arg Ser Glu Val Asp Met Phe Val Ala Gln Ala Val Leu Gln Phe Leu
 165 170 175
 Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr
 180 185 190
 Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu

195	200	205
Leu Asn Phe Ile Trp Phe	Leu Leu Leu Ala Val Asp Gly	Gly Lys Leu
210	215	220
Thr Val Phe Thr Val Leu Cys Glu Gln Tyr	Gln Pro Ser Leu Arg	Arg
225	230	235
Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg	Ile Gly Gln Leu Phe	Phe
245	250	255
Gly Val Pro Pro Lys Gln Thr Ser Ser	Tyr Gly Gly	Leu Leu Gly Asn
260	265	270
Leu Leu Thr Ser Leu Met Gly Ser Ser	Glu Gln Glu Asp	Gly Glu Glu
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Ser Pro Ser Asp Gly Ser Pro Ile	Glu Leu Asp	
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<210> 3603

<211> 1082

<212> DNA

<213> Homo sapiens

<400> 3603

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 480
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 780
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 900
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 960
 agctgtgccg attaaatttggtatgcaag aatatcgggt accccagggaa gtacaaacac
 1020

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 1080
 tt
 1082

<210> 3604
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 3604
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 Val Ala Ala Gln Glu Glu Pro Asp Lys Glu Gly Lys Glu Lys Pro His
 35 40 45
 Ala Gly Val Ser Pro Arg Gly Val Lys Arg Gln Arg Arg Ser Ser Ser
 50 55 60
 Gly Gly Ser Gln Glu Lys Arg Gly Arg Pro Ser Gln Glu Pro Pro Leu
 65 70 75 80
 Ala Pro Pro His Arg Arg Arg Ser Arg Gln His Pro Gly Pro Leu
 85 90 95
 Pro Pro Thr Asn Ala Ala Pro Thr Val Pro Gly Pro Val Glu Pro Leu
 100 105 110
 Leu Leu Pro Pro Pro Pro Pro Ser Leu Ala Pro Ala Gly Pro Ala
 115 120 125
 Val Ala Ala Pro Leu Pro Ala Pro Ser Thr Arg Pro Ser Ser Pro Ser
 130 135 140
 Arg Leu
 145

<210> 3605
 <211> 2004
 <212> DNA
 <213> Homo sapiens

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660 ccgtccatcg aggacggggcc tccggttgtg gagccgctgc ttaacttcat ctggttcctg
720 ctgctggctg tggacgggtgg gaagctgacg gtgttcaactg tgctgtgtga gcagtaccag
780 ccatccctcc ggccggaccc catgtacaac gagtacctcg accgcataagg acagctgttc
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<211> 324
<212> PRT
<213> Homo sapiens

<400> 3606

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Lys	Gly	Asp	Tyr	Tyr	Glu	Ala	His	Gln	Met	Tyr	Arg	Thr	Leu	Phe	Phe
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Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His	Gly	Gln	Gln	Asn	Ser	Ala	Ala
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Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser	Leu	Glu	Lys	Ala	Glu	Val	Glu
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Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu	Ala	Lys	Val	Phe	Ser	Leu	Met
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Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr	Phe	Val	Ser	Arg	Ala	Leu	Lys
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Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu	Gly	His	Pro	Arg	Leu	His	Gln
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Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu	Gln	Asn	Tyr	Cys	Glu	Ser	Arg
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Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly	Glu	Gly	Cys	Ala	Asn	Met	Leu
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Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe	Arg	Ser	Glu	Val	Asp	Met	Phe
								180			185		190		
Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu	Cys	Leu	Lys	Asn	Lys	Ser	Ser
								195			200		205		
Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr	Gln	Lys	His	Pro	Ser	Ile	Glu
								210			215		220		
Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu	Leu	Asn	Phe	Ile	Trp	Phe	Leu
								225			230		235		240
Leu	Leu	Ala	Val	Asp	Gly	Gly	Lys	Leu	Thr	Val	Phe	Thr	Val	Leu	Cys
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Glu	Gln	Tyr	Gln	Pro	Ser	Leu	Arg	Arg	Asp	Pro	Met	Tyr	Asn	Glu	Tyr
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Leu	Asp	Arg	Ile	Gly	Gln	Leu	Phe	Phe	Gly	Val	Pro	Pro	Lys	Gln	Thr
								275			280		285		
Ser	Ser	Tyr	Gly	Gly	Leu	Leu	Gly	Asn	Leu	Leu	Thr	Ser	Leu	Met	Gly
								290			295		300		
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Ile	Glu	Leu	Asp												

<210> 3607
<211> 1726
<212> DNA
<213> Homo sapiens

<400> 3607

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 1726

<210> 3608
 <211> 436
 <212> PRT
 <213> Homo sapiens

<400> 3608
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 Glu Val Lys Trp Ser Val Arg Met Thr Leu Cys Ala Gly Ile Cys Ser
 35 40 45
 Tyr Glu Gly Lys Gly Gly Met Cys Ser Ile Arg Leu Ser Glu Pro Leu
 50 55 60
 Leu Lys Leu Arg Pro Arg Lys Asp Leu Val Glu Thr Leu Leu His Glu
 65 70 75 80
 Met Ile His Ala Tyr Leu Phe Val Thr Asn Asn Asp Lys Asp Arg Glu
 85 90 95
 Gly His Gly Pro Glu Phe Cys Lys His Met His Arg Ile Asn Ser Leu
 100 105 110
 Thr Gly Ala Asn Ile Thr Val Tyr His Thr Phe His Asp Glu Val Asp
 115 120 125
 Glu Tyr Arg Arg His Trp Trp Arg Cys Asn Gly Pro Cys Gln His Arg
 130 135 140
 Pro Pro Tyr Tyr Gly Tyr Val Lys Arg Ala Thr Asn Arg Glu Pro Ser
 145 150 155 160
 Ala His Asp Tyr Trp Trp Ala Glu His Gln Lys Thr Cys Gly Thr
 165 170 175
 Tyr Ile Lys Ile Lys Glu Pro Glu Asn Tyr Ser Lys Lys Gly Lys Gly
 180 185 190
 Lys Ala Lys Leu Gly Lys Glu Pro Val Leu Ala Ala Glu Asn Lys Asp
 195 200 205
 Lys Pro Asn Arg Gly Glu Ala Gln Leu Val Ile Pro Phe Ser Gly Lys
 210 215 220
 Gly Tyr Val Leu Gly Glu Thr Ser Asn Leu Pro Ser Pro Gly Lys Leu
 225 230 235 240
 Ile Thr Ser His Ala Ile Asn Lys Thr Gln Asp Leu Leu Asn Gln Asn
 245 250 255
 His Ser Ala Asn Ala Val Arg Pro Asn Ser Lys Ile Lys Val Lys Phe
 260 265 270
 Glu Gln Asn Gly Ser Ser Lys Asn Ser His Leu Val Ser Pro Ala Val
 275 280 285
 Ser Asn Ser His Gln Asn Val Leu Ser Asn Tyr Phe Pro Arg Val Ser
 290 295 300
 Phe Ala Asn Gln Lys Ala Phe Arg Gly Val Asn Gly Ser Pro Arg Ile
 305 310 315 320
 Ser Val Thr Val Gly Asn Ile Pro Lys Asn Ser Val Ser Ser Ser Ser
 325 330 335
 Gln Arg Arg Val Ser Ser Lys Ile Ser Leu Arg Asn Ser Ser Lys

	340	345	350
Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser			
355	360	365	
Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val			
370	375	380	
Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn			
385	390	395	400
Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser			
405	410	415	
Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu			
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Gly Val Ser Asp			
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<210> 3609  
<211> 1286  
<212> DNA  
<213> Homo sapiens
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<400> 3609
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120
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180
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240
gaagctccca gggactattt cctcaagttt gcctatattt tggatttggaa cagcgacaca
300
360
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420
caannctacc ctttgtcgcc cacccgcttc acccattgtg agcaggtgct gggcgagggt
480
540
ggccctggacc gaggcaccta ctactggag gtggagatta tcgagggctg ggtcagcatg
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 1140
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 1260
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 1286
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<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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Gly	Gly	Asn	Glu	Asp	Gly	Pro	Gln	Lys	Leu	Asp	Leu	Glu	Ala	Asp	Ala	
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Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro	
										35	40				45	
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp	
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Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu	
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Gly	Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
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His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr	
										100	105				110	
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met	
										115	120				125	
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly	
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Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser	
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Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro	
										165	170				175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr	
										180	185				190	
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser	
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Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln	
										210	215				220	
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys	
										225	230				240	
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro	
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<210> 3611

<211> 816

<212> DNA
<213> Homo sapiens

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180
gaccacgca gggcttcagt gacaaggagg acgtttggc acagcggcat tgcagtgcac
240
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300
cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt
360
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420
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540
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660
cccattgttc ggagaagaat aggaacagcc ttcaaactgg atgaacagaa aatcctgccc
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780
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816

<210> 3612
<211> 272
<212> PRT
<213> Homo sapiens

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20 25 30
Lys Val Lys Pro Arg Lys Ile Phe Gln Trp Arg Gln Leu Glu Asn Leu
35 40 45
Tyr Phe Arg Glu Lys Lys Phe Ser Val Glu Val His Asp Pro Arg Arg
50 55 60
Ala Ser Val Thr Arg Arg Thr Phe Gly His Ser Gly Ile Ala Val His
65 70 75 80
Thr Trp Tyr Ala Cys Pro Ala Leu Ile Lys Ser Ile Trp Ala Met Ala
85 90 95
Ile Ser Gln His Gln Phe Tyr Leu Asp Arg Lys Gln Ser Lys Ser Lys
100 105 110
Ile His Ala Ala Arg Ser Leu Ser Glu Ile Ala Ile Asp Leu Thr Glu

115	120	125
Thr Gly Thr Leu Lys Thr Ser Lys Leu Ala Asn Met	Gly Ser Lys Gly	
130	135	140
Lys Ile Ile Ser Gly Ser Ser Gly Ser Leu Leu Ser Ser	Gly Ser Gln	
145	150	155
Glu Ser Asp Ser Ser Gln Ser Ala Lys Lys Asp Met	Leu Ala Ala Leu	160
165	170	175
Lys Ser Arg Gln Glu Ala Leu Glu Glu Thr Leu Arg	Gln Arg Leu Glu	
180	185	190
Glu Leu Lys Lys Leu Cys Leu Arg Glu Ala Glu Leu	Thr Gly Lys Leu	
195	200	205
Pro Val Glu Tyr Pro Leu Asp Pro Gly Glu Glu Pro	Pro Ile Val Arg	
210	215	220
Arg Arg Ile Gly Thr Ala Phe Lys Leu Asp Glu Gln	Lys Ile Leu Pro	240
225	230	235
Lys Gly Glu Glu Ala Glu Leu Glu Arg Leu Glu Arg	Glu Phe Ala Ile	
245	250	255
Gln Ser Gln Ile Thr Glu Ala Ala Arg Arg Leu Ala	Ser Asp Pro Asn	
260	265	270

<210> 3613

<211> 659

<212> DNA

<213> Homo sapiens

<400> 3613

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120
cacctggatc cctgcagccc agcctggaat gcgtctggat tagggaaaag acgagaaaacg
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<210> 3614

<211> 123

<212> PRT

<213> Homo sapiens

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 Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
 35 40 45
 Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
 50 55 60
 Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
 65 70 75 80
 Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
 85 90 95
 Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
 100 105 110
 Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
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<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

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 180
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 540
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 660
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 720
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 1388

<210> 3616
 <211> 290
 <212> PRT
 <213> Homo sapiens

<400> 3616
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 Glu Arg Ser Gly Ser Gln Thr Glu Ser Glu Glu Ser Ser Glu Met
 35 40 45
 Asp Asp Glu Asp Tyr Glu Arg Arg Ser Glu Cys Val Ser Glu Met
 50 55 60
 Leu Asp Leu Glu Lys Gln Phe Ser Glu Leu Lys Glu Lys Leu Phe Arg
 65 70 75 80
 Glu Arg Leu Ser Gln Leu Arg Leu Arg Leu Glu Glu Val Gly Ala Glu
 85 90 95
 Arg Ala Pro Glu Tyr Thr Glu Pro Leu Gly Gly Leu Gln Arg Ser Leu
 100 105 110
 Lys Ile Arg Ile Gln Val Ala Gly Ile Tyr Lys Gly Phe Cys Leu Asp
 115 120 125
 Val Ile Arg Asn Lys Tyr Glu Cys Glu Leu Gln Gly Ala Lys Gln His
 130 135 140
 Leu Glu Ser Glu Lys Leu Leu Tyr Asp Thr Leu Gln Gly Glu Leu
 145 150 155 160
 Gln Glu Arg Ile Gln Arg Leu Glu Glu Asp Arg Gln Ser Leu Asp Leu
 165 170 175
 Ser Ser Glu Trp Trp Asp Asp Lys Leu His Ala Arg Gly Ser Ser Arg
 180 185 190
 Ser Trp Asp Ser Leu Pro Pro Ser Lys Arg Lys Lys Ala Pro Leu Val
 195 200 205
 Ser Gly Pro Tyr Ile Val Tyr Met Leu Gln Glu Ile Gly Ile Leu Glu
 210 215 220
 Asp Trp Thr Ala Ile Lys Lys Ala Arg Ala Ala Val Ser Pro Gln Lys

225	230	235	240
Arg Lys Ser Asp Asp Arg Arg Thr His Arg Pro Leu Arg Val Cys Pro			
245	250	255	
Ala Arg Leu Leu Trp Cys Cys Trp Ala Leu Pro Leu His Leu Ala Leu			
260	265	270	
Ala Trp Thr Pro Pro Leu Pro Ser Ser Arg Pro Ala Gln Leu Trp Pro			
275	280	285	
Trp Ser			
290			

<210> 3617

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3617

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<210> 3618

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3618

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20	25	30
Leu Ala Gly His His Lys Tyr	Leu His Thr Thr Ile Phe	Gly Leu Thr
35	40	45
Ser Tyr Cys Pro Asp Cys	Ala Leu Leu Leu Val Ser	Ala Asn Thr Gly
50	55	60
Ile Ala Gly Thr Thr Arg	Glu His Leu Gly Leu Ala	Leu Ala Leu Lys
65	70	75
Val Pro Phe Phe Ile Val Val	Ser Lys Ile Asp Leu Cys	Ala Lys Thr
85	90	95
Thr Val Glu Arg Thr Val Arg	Gln Leu Glu Arg Val	Leu Lys Gln Pro
100	105	110
Gly Cys His Lys Val Pro Met	Leu Val Thr Ser Glu Asp	Asp Ala Val
115	120	125
Thr Ala Ala Gln Gln Phe	Ala Gln Ser Pro Asn Val	Thr Pro Ile Phe
130	135	140
Thr Leu Ser Ser		
145		

<210> 3619
<211> 948
<212> DNA
<213> Homo sapiens

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948

<210> 3620

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

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20									25				30		
Ser	Ser	Ser	Ser	Met	Ala	Thr	Pro	Leu	Ser	Cys	Cys	Pro	Thr	Trp	Ala
35									40				45		
Pro	Gly	Ala	Ser	Ser	Gln	Pro	Cys	Ser	Thr	Tyr	Pro	Pro	Trp	Arg	Thr
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Thr	Thr	Leu	Ser	Thr	Ser	Thr	Ser	Trp	Ser	Cys	Leu	Leu	Leu	Pro	Cys
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100									105				110		
Cys	His	Ser	Ser	Thr	Pro	Cys	Gly	Ser	Phe	Pro	Ala	Trp	Pro	Thr	Arg
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<210> 3621

<211> 2934

<212> DNA

<213> Homo sapiens

<400> 3621

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300					
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360					
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420					
tccatccacc	acatcagaac	aatgtcgat	gtttttgtt	atgattctc	tcagactaac
480					
gtgcccttgc	tgcaagcctg	tattgatggg	gactttaatt	attccaagcg	gcttttggaa
540					

agtggcttg acccaaatac tcgtgacagc aggggcagaa caggcattca ctttcagca
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<211> 228

<212> PRT

<213> Homo sapiens

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 Glu Ser Gly Phe Asp Pro Asn Ile Arg Asp Ser Arg Gly Arg Thr Gly
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 His Lys Phe Gly Ala Asp Leu Leu Ala Thr Asp Tyr Gln Gly Asn Thr
 65 70 75 80
 Ala Leu His Leu Cys Gly His Val Asp Thr Ile Gln Phe Leu Val Ser
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 Asn Gly Leu Lys Ile Asp Ile Cys Asn His Gln Gly Ala Thr Pro Leu
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<210> 3623

<211> 586

<212> DNA

<213> Homo sapiens

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<211> 159

<212> PRT

<213> Homo sapiens

<400> 3624

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 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val
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 Gly Ile Asn Ile Thr Asp Leu Ala Tyr Asn Leu Leu Val Ser Gly Ala
 65 70 75 80
 Leu Lys Thr His Phe Tyr Asn Ile Ala Pro Glu Ala Pro Thr Leu Ser

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His Phe Gln Gln Thr Phe Cys Tyr Leu Met His Glu Phe His Lys Phe		
100	105	110
Trp Ile Glu Glu Asp Pro Met Asp Ile Met Glu Phe Asn Arg Val Arg		
115	120	125
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<212> DNA

<213> Homo sapiens

<400> 3625

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly	Val Pro Val Ser	
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355	360	365
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485	490	495
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Val Pro Pro Val Pro Gly Ala Pro Pro Thr Tyr Ile	Ser Pro Leu Gly	
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<210> 3627

<211> 1760

<212> DNA

<213> Homo sapiens

<400> 3627

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<210> 3628
<211> 440
<212> PRT

<213> Homo sapiens

<400> 3628
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 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys
 210 215 220
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg
 225 230 235 240
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys
 245 250 255
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro
 260 265 270
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile
 275 280 285
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln
 290 295 300
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys
 305 310 315 320
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe
 325 330 335
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly
 340 345 350
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu
 355 360 365
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp
 370 375 380
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe
 385 390 395 400
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr

405	410	415
Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser		
420	425	430
Pro Asp Lys Val Ile Leu Cys Leu		
435	440	

<210> 3629

<211> 695

<212> DNA

<213> Homo sapiens

<400> 3629

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 120
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 180
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 240
 gcactgctgc cgcaattggc agcaaacgca gtgctgttcc tgtgcgggaa cgtggcagga
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 360
 tccctgcact cacgccccggcg gctggacacc gagaagaagc accaggtcag ccgggcctag
 420
 gaaggtcaga gcagcgctcc gagggaggag ttgcttagat tacataacgg ggctcctcca
 480
 caagttgagt gactctgggc aggttttttgc acotgtttct tcttttgtat aaaatgtggg
 540
 tattgccccat cttagaaggt tgtgaggctc aaacaaaacca aagcttataa aaagcacttt
 600
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 660
 aaaggtgatc agtgttaggat ggagtgtgg ggccc
 695

<210> 3630

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3630

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 20 25 30
 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His
 50 55 60
 Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro
 65 70 75 80
 Ala Leu Leu Pro Gln Leu Ala Ala Asn Ala Val Leu Phe Leu Cys Gly

85	90	95
Asn Val Ala Gly Val Tyr His Lys Ala Leu Met Glu Arg Ala Leu Arg		
100	105	110
Ala Thr Phe Arg Glu Ala Leu Ser Ser Leu His Ser Arg Arg Arg Leu		
115	120	125
Asp Thr Glu Lys Lys His Gln Val Ser Arg Ala		
130	135	

<210> 3631

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3631
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 120 gctgcaaagg aatcagtccc ggctggatca tgtctgcatt tcccagatgt gctattccc
 180 ggggattggg cctggtacat gcagtatctg gagaagcgca agaattctgt gtgccacttt
 240 gtgacacccc tggacggctc tgtggacgta gacgagcacc gccggccgga ggccatcacc
 300 acggaaggga agtactggaa gagccgcattc gagattgtga tccgggagta tcacaagtgg
 360 agaacctact tcaagaaaag gctacagcag cacaaggatg aggacctctc cagcctggtc
 420 caggacgatg acatgctgta ttggcacaag cacggggatg gatggaagac ccccgcccc
 480 atggaggagg atccccctgt ggacacagac atgctcatgt cggaattcag cgacaccctc
 540 ttctccacac ttcttcaca ccagccggtg gcctggccca atccccggga aatagcacat
 600 ctggaaatg cagacatgat ccagccggga ctgattcatt tgcaagctaa cctggacttc
 660 atggacacct ttgagcctt ccaggacctc ttctttcta gccgctccat tttggctcc
 720 atgctacctg catctgcctc agcacctgta ccagatccca acaaccacc tgcacaggag
 780 agcatctgc cgaccacage cctcccaact gtgagccttc ctgacagcct catcgccccc
 840 cccaccgccc catccctggc ggc
 864

<210> 3632

<211> 222

<212> PRT

<213> Homo sapiens

<400> 3632
 Met Gln Tyr Leu Glu Lys Arg Lys Asn Pro Val Cys His Phe Val Thr
 1 5 10 15
 Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

	20	25	30
Ile Thr Thr Glu Gly Lys Tyr Trp Lys Ser Arg Ile Glu Ile Val Ile			
	35	40	45
Arg Glu Tyr His Lys Trp Arg Thr Tyr Phe Lys Lys Arg Leu Gln Gln			
	50	55	60
His Lys Asp Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu			
	65	70	75
Tyr Trp His Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu			
	85	90	95
Glu Asp Pro Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp			
	100	105	110
Thr Leu Phe Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn			
	115	120	125
Pro Arg Glu Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly			
	130	135	140
Leu Ile Pro Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro			
	145	150	155
Phe Gln Asp Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu			
	165	170	175
Pro Ala Ser Ala Ser Ala Pro Val Pro Asp Pro Asn Asn Pro Pro Ala			
	180	185	190
Gln Glu Ser Ile Leu Pro Thr Thr Ala Leu Pro Thr Val Ser Leu Pro			
	195	200	205
Asp Ser Leu Ile Ala Pro Pro Thr Ala Pro Ser Leu Ala Arg			
	210	215	220

<210> 3633

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 3633	
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aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcatc	
180	
ctgtgtgaag atggcatttc tcactgatta ttggaaaagc acaagagcca cgtgctggag	
240	
ccattgtcca gccttgcctt ggaggagcag tgtctggctt tgtccctaga ttggtccact	
300	
ggaaaaactg gaagggccgg ggaccagccc ttgaagatca tcagcagtga ctccacaggg	
360	
cagctccacc tcctgatggt gaatgagacg aggcccaggc tgcagaaagt ggcctcatgg	
420	
caggcacatc aattcgaggg ctggattgct gctttcaatt actggcatcc agaaatttg	
480	
tattcagggg gcgacgatgg ctttctgagg ggctgggaca ccagggtacc cggcaaattt	
540	
ctcttcacca gcnaaaagac acaccatnng ggtgtgtca gcatccagag cagccctcat	
600	
cgggagcaca tcctggccac ggaaagctat gatgaacaca tcctactgtg ggacacacga	
660	

aacatgaagc agccgttggc agatacgct gtgcagggtg gggtatggag aatcaagtgg
 720
 cacccttcc accaccacct gctcctggcc gcctgcacgc acagtggctt taagatcctc
 780
 aactgccaaa aggcaatgga ggagaggcag gaggcgacgg tcctgacatc tcacacattg
 840
 840
 cccgactcgc tggtgtatgg agccgactgg tcctggctgc tcttcgttc tctgcagcgg
 900
 900
 gccccctcgt ggtccttcc tagcaaccta ggaaccaaga cggcagacct gaagggtgca
 960
 960
 agcgagttgc caacaccctg tcatgaatgc agagaggata acgatgggaa gggccatgcc
 1020
 1020
 agacccaga gtggaatgaa gccactcaca gagggcatga ggaagaatgg cacctggctg
 1080
 1080
 caggctacag cagccaccac acgtgactgt ggcgtgaacc cagaagaagc agactcagcc
 1140
 1140
 ttcagcctcc tggccacctg ctccctctat gaccatgcgc tccacctctg ggagtggag
 1200
 1200
 gggactgag cttgaaatca tgaagccct tcccacaagg aaaccaggag ggagactgcg
 1260
 1260
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 1320
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 1380
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 1500
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 1570

<210> 3634
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 3634
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 20 25 30
 Glu Ile Val Tyr Ser Gly Gly Asp Asp Gly Leu Leu Arg Gly Trp Asp
 35 40 45
 Thr Arg Val Pro Gly Lys Phe Leu Phe Thr Ser Xaa Lys Thr His His
 50 55 60
 Xaa Gly Val Cys Ser Ile Gln Ser Ser Pro His Arg Glu His Ile Leu
 65 70 75 80
 Ala Thr Gly Ser Tyr Asp Glu His Ile Leu Leu Trp Asp Thr Arg Asn
 85 90 95
 Met Lys Gln Pro Leu Ala Asp Thr Pro Val Gln Gly Gly Val Trp Arg
 100 105 110
 Ile Lys Trp His Pro Phe His His Leu Leu Ala Ala Cys Met

115	120	125
His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg		
130	135	140
Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val		
145	150	155
Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala		160
165	170	175
Pro Ser Trp Ser Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu		
180	185	190
Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp		
195	200	205
Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu		
210	215	220
Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala		
225	230	235
Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe		240
245	250	255
Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp		
260	265	270
Glu Trp Glu Gly Asn		
275		

<210> 3635

<211> 835

<212> DNA

<213> Homo sapiens

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120	
gttttactta aagatgaacc ccagcagact gctgctcaga tgggttgtgc gccaatccag	
180	
cctctggcga tgcctcaagc tttgcctctg gcggcaggc ccttgcctcc agggtccatc	
240	
gcaaatactta cagaactgca aggagtgata gttggacagc cagtaactggg ccaagcacag	
300	
tggcagggc tggggcaagg aattctgaca gaaacacaac aagggttaat gtagccagc	
360	
cctgctcaga ccctcaatga cacgctggat gacatcatgg cagcagtcag tggaaagagca	
420	
tctgcaatgt caaacactcc taccacagt attgctgcat ccatttcccc acctcagact	
480	
ccaactccaa gtcctatcat ctctccttca gccatgcttc ctatctaccc tgccattgat	
540	
attgatgcac agactgagag taatcatgac acggcgctaa cacttgctg tgctggggc	
600	
cacgaggaac tggtacaaac actgcttagag agaggagcta gtatagagca ccgagacaag	
660	
aaaggttta ctccactcat cttggctgcc acagctggc atgttgggtgt tgtggaaata	
720	
ttgctggaca atggtgcaaga cattgaagcc cagtcgtaaa gaaccaagga cacaccactc	
780	

tccttggctt gttctggggg aagacaggag gtgggtggagc tattgttagc tcgag
835

<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

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								25				30			
Ala	Arg	Leu	Gln	Gln	Val	Asp	Pro	Val	Leu	Leu	Lys	Asp	Glu	Pro	Gln
								40			45				
Gln	Thr	Ala	Ala	Gln	Met	Gly	Cys	Ala	Pro	Ile	Gln	Pro	Leu	Ala	Met
								55			60				
Pro	Gln	Ala	Leu	Pro	Leu	Ala	Ala	Gly	Pro	Leu	Pro	Pro	Gly	Ser	Ile
								70			75			80	
Ala	Asn	Leu	Thr	Glu	Leu	Gln	Gly	Val	Ile	Val	Gly	Gln	Pro	Val	Leu
								85			90			95	
Gly	Gln	Ala	Gln	Leu	Ala	Gly	Leu	Gly	Gln	Gly	Ile	Leu	Thr	Glu	Thr
								100			105			110	
Gln	Gln	Gly	Leu	Met	Val	Ala	Ser	Pro	Ala	Gln	Thr	Leu	Asn	Asp	Thr
								115			120			125	
Leu	Asp	Asp	Ile	Met	Ala	Ala	Val	Ser	Gly	Arg	Ala	Ser	Ala	Met	Ser
								130			135			140	
Asn	Thr	Pro	Thr	His	Ser	Ile	Ala	Ala	Ser	Ile	Ser	Gln	Pro	Gln	Thr
								145			150			155	
Pro	Thr	Pro	Ser	Pro	Ile	Ile	Ser	Pro	Ser	Ala	Met	Leu	Pro	Ile	Tyr
								165			170			175	
Pro	Ala	Ile	Asp	Ile	Asp	Ala	Gln	Thr	Glu	Ser	Asn	His	Asp	Thr	Ala
								180			185			190	
Leu	Thr	Leu	Ala	Cys	Ala	Gly	Gly	His	Glu	Glu	Leu	Val	Gln	Thr	Leu
								195			200			205	
Leu	Glu	Arg	Gly	Ala	Ser	Ile	Glu	His	Arg	Asp	Lys	Lys	Gly	Phe	Thr
								210			215			220	
Pro	Leu	Ile	Leu	Ala	Ala	Thr	Ala	Gly	His	Val	Gly	Val	Val	Glu	Ile
								225			230			235	
Leu	Leu	Asp	Asn	Gly	Ala	Asp	Ile	Glu	Ala	Gln	Ser	Glu	Arg	Thr	Lys
								245			250			255	
Asp	Thr	Pro	Leu	Ser	Leu	Ala	Cys	Ser	Gly	Gly	Arg	Gln	Glu	Val	Val
								260			265			270	
Glu	Leu	Leu	Leu	Ala	Arg										
					275										

<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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120
cctgccaaacc cctgctcttc caggtcggc cccggggttc tgccgctgtt agggacagag
180
gcaaagaagg gcaggacgtt ccgggttccc gtggatgttc ccgcccaga aagacagcaa
240
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300
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420
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660
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720
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780
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840
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900
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960
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1020
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1080
accaagagca gacagaggag aagatggcc aaaggggctt ggagaggtca aaacatccac
1140
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1200
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1260
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1320
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1380
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1440
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1560
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1620
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1680

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 1740
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 1800
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 1860
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 1920
 aggagagaat tcagccgaag atatgagagt aatgagagac atttccagt cattggatcg
 1980
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<210> 3638

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3638

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Phe	Leu	Cys	Ala	Ala	Thr	Ser	Cys	Val	Gly	Phe	Phe	Met	Pro	Tyr	Trp	
									25						30	
Leu	Trp	Gly	Ser	Gln	Leu	Gly	Lys	Pro	Val	Ser	Phe	Gly	Thr	Phe	Arg	
									40						45	
Arg	Cys	Ser	Tyr	Pro	Val	His	Asp	Glu	Ser	Arg	Gln	Met	Met	Val	Met	
									55						60	
Val	Glu	Glu	Cys	Gly	Arg	Tyr	Ala	Ser	Phe	Gln	Gly	Ile	Pro	Ser	Ala	
									70			75			80	
Glu	Trp	Arg	Ile	Cys	Thr	Ile	Val	Thr	Gly	Leu	Gly	Cys	Gly	Leu	Leu	
									85			90			95	
Leu	Leu	Val	Ala	Leu	Thr	Ala	Leu	Met	Gly	Cys	Cys	Val	Ser	Asp	Leu	
								100			105			110		
Ile	Ser	Arg	Thr	Val	Gly	Arg	Val	Ala	Gly	Gly	Ile	Gln	Phe	Leu	Gly	
								115			120			125		
Gly	Leu	Leu	Ile	Gly	Ala	Gly	Cys	Ala	Leu	Tyr	Pro	Leu	Gly	Trp	Asp	
								130			135			140		
Ser	Glu	Glu	Val	Arg	Gln	Thr	Cys	Gly	Tyr	Thr	Ser	Gly	Gln	Phe	Asp	
								145			150			155		160
Leu	Gly	Lys	Cys	Glu	Ile	Gly	Trp	Ala	Tyr	Tyr	Cys	Thr	Gly	Ala	Gly	
								165			170			175		
Ala	Thr	Ala	Ala	Met	Leu	Leu	Cys	Thr	Trp	Leu	Ala	Cys	Phe	Ser	Gly	
								180			185			190		
Lys	Lys	Gln	Lys	His	Tyr	Pro	Tyr									
								195			200					

<210> 3639

<211> 726

<212> DNA

<213> Homo sapiens

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120
aagactaaca gtggttatct ctcagcgga ttataaatgt tttggtttt tttttttt
180
tgtacatccc agtattttt gaaattttt taataagcgt gtattacata cagtaaacaa
240
aagcacatta atgttaggcag attatcaatg ttatgcattt cactgattgc atatctctt
300
tttatcaat ggtgaacatt gcaaatttattt gatacgtttt tcttaggaag tggcattgcc
360
acaaatggtt tttccaacac cagcaggcc tgagagtgtc atcaccatac actcttgccg
420
gcaataaaaa aatttcaccc tttaatggat taaaaggaa aaagttgggg tgggggttc
480
tccaggcat ttcttcattt atgagtgaca ttttctgaa aggaacgtga tctcgtttc
540
tagccgcattt aagcatttctt ccaacaagac ccactgtacc agtccctggga tctccacacc
600
tgtgccttctt ccctgtcttt tctaggtctt gattctcacc tctgcctgtg taataaccct
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720
taagat
726

<210> 3640
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3640
Met Leu His Ala Ala Arg Lys Arg Asp His Val Pro Phe Arg Lys Met
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Ser Leu Ile Met Lys Glu Met Pro Trp Arg Thr Gln His Pro Asn Phe
20 25 30
Ser Leu Leu Asn Pro Leu Lys Gly Glu Ile Phe Leu Leu Pro Ala Arg
35 40 45
Val Tyr Gly Asp Asp Thr Leu Arg Pro Cys Trp Cys Trp Lys Asn His
50 55 60
Leu Trp Gln Cys His Phe Leu Arg Lys Thr Tyr Gln Ser Phe Ala Met
65 70 75 80
Phe Thr Ile Asp Lys Lys Arg Asp Met Gln Ser Val Lys Cys Ile Thr
85 90 95
Leu Ile Ile Cys Leu His
100

<210> 3641
<211> 455
<212> DNA
<213> Homo sapiens

<400> 3641
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cgcggggcg ggcggggcggt gcggctcccg gagggcgagga aatgtcgca agccccgagg
120
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180
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<210> 3642

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3642
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20 25 30
Gln Ser Pro Glu Glu Ser Arg Ser Ser His Ala Ser Arg Asp Leu Ala
35 40 45
Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
50 55 60
Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
65 70 75 80
Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
85 90 95
Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
100 105 110
Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
115 120 125
Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
130 135 140
Phe Lys Thr Arg
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<210> 3643

<211> 2243

<212> DNA

<213> Homo sapiens

<400> 3643
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120 ctttgcaga aggtggccag taaagctgag gagaatctgc tcatacggtc ggggacagac
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240 attgcccgcata ttgtggagac ccaccagcca atagtggaga cctattatgg gccaggggaga
300 ctctataccctgatcaaata tctgcagggtg gaatgtgaca gacaggtgga gaaggtggta
360 gacaagttca tcaagcaaag ggactaccac cagcagttcc ggcatttcgaacaacctg
420 atgagaaatt ctacaacaga aaaaatcgaa ccaagagaac tggacccat cctgactgag
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660 ttatatgtta ccatggagga gtacttcatg agggagactg tcaataaggc tgtggctctg
720 gacacccatg agaagggccca gctgacatcc agcatggtgg atgatgtctt ctacattgtt
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1260 caggtgcagc cttggatcaa cagtttttc tccgtctccc acaacatcga ggaggaagaa
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1380 caaatggcag agttcaaggc cagcctgtcc cccgtcatct acgacagcct aaccggccctc
1440 atgactagcc ttgttgcgt cgagttggag aaagtgggtgc tgaaaatccac cttaaccgg
1500 ctgggtggtc tgcagttga caaggagctg aggtcaactca ttgcctacct taccacgg
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1680

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 1860
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 1920
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 1980
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 2040
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 2100
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 2220
 aaaaaaaaaaaa aaaaaaaaaaaa aaa
 2243

<210> 3644
 <211> 560
 <212> PRT
 <213> Homo sapiens

<400> 3644
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 20 25 30
 Asp Met Ser Asp Arg Arg Ala Ala Val Ile Phe Ala Asp Thr Leu Thr
 35 40 45
 Leu Leu Phe Glu Gly Ile Ala Arg Ile Val Glu Thr His Gln Pro Ile
 50 55 60
 Val Glu Thr Tyr Tyr Gly Pro Gly Arg Leu Tyr Thr Leu Ile Lys Tyr
 65 70 75 80
 Leu Gln Val Glu Cys Asp Arg Gln Val Glu Lys Val Val Asp Lys Phe
 85 90 95
 Ile Lys Gln Arg Asp Tyr His Gln Gln Phe Arg His Val Gln Asn Asn
 100 105 110
 Leu Met Arg Asn Ser Thr Thr Glu Lys Ile Glu Pro Arg Glu Leu Asp
 115 120 125
 Pro Ile Leu Thr Glu Val Thr Leu Met Asn Ala Arg Ser Glu Leu Tyr
 130 135 140
 Leu Arg Phe Leu Lys Lys Arg Ile Ser Ser Asp Phe Glu Val Gly Asp
 145 150 155 160
 Ser Met Ala Ser Glu Glu Val Lys Gln Glu His Gln Lys Cys Leu Asp
 165 170 175
 Lys Leu Leu Asn Asn Cys Leu Leu Ser Cys Thr Met Gln Glu Leu Ile
 180 185 190
 Gly Leu Tyr Val Thr Met Glu Glu Tyr Phe Met Arg Glu Thr Val Asn
 195 200 205
 Lys Ala Val Ala Leu Asp Thr Tyr Glu Lys Gly Gln Leu Thr Ser Ser

210	215	220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala		
225	230	235
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala		240
245	250	255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu		
260	265	270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val		
275	280	285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe		
290	295	300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu		
305	310	315
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu		320
325	330	335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile		
340	345	350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu		
355	360	365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr		
370	375	380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn		
385	390	395
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp		400
405	410	415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu		
420	425	430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp		
435	440	445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys		
450	455	460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp		
465	470	475
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp		480
485	490	495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu		
500	505	510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser		
515	520	525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu		
530	535	540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu		
545	550	560

<210> 3645

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3645

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120

tcgggttgat ttcctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt
 180
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt
 240
 ggaacagggc caggcaccac ggctcggtga agtagctata gagatctgtg atcaggttt
 300
 catcgtaaccg agcacacagg ttgtttagga gttgctcgta ctggccaaac aagcggatgt
 360
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 420
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 480
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 540
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg
 600
 ggatgagccg gtcaagatata gctgggtggct cggtcacagg ctcaagggtt ggatcaaaga
 660
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 720
 gcccattcat ttgagtagta tctattggag aatttggta gggagccagc agctctgatg
 780
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 823

<210> 3646
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 3646
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 20 25 30
 Thr Glu Pro Pro Ala Asn Leu Asp Arg Leu Ile Pro Met Tyr Lys Gly
 35 40 45
 Ala Lys Ile Gln Gly Gly Ile Leu Pro Gly Ser Tyr His Tyr Leu His
 50 55 60
 Ile Ala Lys Pro Ala Ile Pro Thr Pro Leu Glu Val Gln Met Ala Gln
 65 70 75 80
 Pro Asn Tyr Gly Leu Glu Leu Val Thr Gly Ser Ala Lys Asn Gly Thr
 85 90 95
 Tyr Phe Arg Ile His Ile Asn Lys Tyr Lys Met Val Glu Thr Ile Thr
 100 105 110
 Cys Leu Ser Arg Glu Pro Phe Pro Ala Ser Asn Tyr Ile Arg Leu Phe
 115 120 125
 Gly Gln His Glu Gln Leu Leu Asn Asn Leu Cys Ala Arg Tyr Asp Glu
 130 135 140
 Asn Leu Ile Thr Asp Leu Tyr Ser Tyr Phe Thr Glu Pro Trp Cys Leu
 145 150 155 160
 Ala Leu Phe His Asp Arg Phe Ile Asp Leu Arg Lys Glu Leu Arg Gln
 165 170 175
 Ile Leu Ala Ser Lys Glu Glu Asp Leu Pro Ser Ile Glu Gln Leu

180	185	190
Ala His Gln Ile Glu Asp Glu Glu Ile Asn Pro Thr Glu Lys Pro Arg		
195	200	205
Gln Tyr Leu Lys Arg Val Phe Glu Glu Ser Ile Tyr Lys Thr Leu Val		
210	215	220
Glu Arg Ser Thr Leu Asp Tyr Leu His Tyr Asn Arg Tyr His Leu Pro		
225	230	235
Met Tyr Ala		

<210> 3647
<211> 584
<212> DNA
<213> Homo sapiens

<400> 3647
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120
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180
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240
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300
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360
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420
gccgctccga ccccgcgatcc cccgcagacc ccacactggc gcgcggccac aacgtcatca
480
atgtcatcgt ccccgagagc cgagccact tcttccagca gctgggctac gtgctggcca
540
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584

<210> 3648
<211> 63
<212> PRT
<213> Homo sapiens

<400> 3648
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20 25 30
Val Ser Ser Arg Trp Arg Ser Pro Thr Arg Ala Pro Thr Pro Ala Thr
35 40 45
Cys Thr Thr Ile Thr Val Ala Cys Thr Asn Ala Ala Ser Ser Thr
50 55 60

<210> 3649
<211> 648

<212> DNA

<213> Homo sapiens

<400> 3649

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 120
 tgctcattgt ttgctgtgct cccctttttt tttcaggttg ctatttctgc agatgtcaaa
 180
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 240
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 300
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 360
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 420
 cccagggggaa aagcgatggt atttgccccca cgccgaggga atactttaaa ccagtttgc
 480
 aatctagctg aaaaagctgg tttctgtatc caaagacatg aaaattatga tgaacacatt
 540
 tcaaacttcc actccaagtt gaaaaaggaa aacccggaca tatatgaaga aaaccttcatt
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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

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His Ile Cys Ser Leu Phe Ala Val Leu Pro Phe Phe Phe Gln Val Ala			
20	25	30	
Ile Ser Ala Asp Val Lys Glu Val Leu Leu Thr Asp Gly Asn Glu Lys			
35	40	45	
Ala Ile Arg Asn Val Gln Asp Ile Ile Thr Arg Asn Gln Lys Ala Gly			
50	55	60	
Val Phe Lys Thr Gln Lys Ile Ser Ser Cys Val Leu Arg Trp Asp Asn			
65	70	75	80
Glu Thr Asp Val Ser Gln Leu Glu Gly His Phe Asp Ile Val Met Cys			
85	90	95	
Ala Asp Cys Leu Phe Leu Asp Gln Tyr Arg Ala Ser Leu Val Asp Ala			
100	105	110	
Ile Lys Arg Leu Leu Gln Pro Arg Gly Lys Ala Met Val Phe Ala Pro			
115	120	125	
Arg Arg Gly Asn Thr Leu Asn Gln Phe Cys Asn Leu Ala Glu Lys Ala			
130	135	140	
Gly Phe Cys Ile Gln Arg His Glu Asn Tyr Asp Glu His Ile Ser Asn			
145	150	155	160
Phe His Ser Lys Leu Lys Lys Glu Asn Pro Asp Ile Tyr Glu Glu Asn			

165	170	175
Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly		
180	185	

<210> 3651
<211> 2469
<212> DNA
<213> Homo sapiens

<400> 3651
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120
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180
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240
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360
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420
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720
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1140
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1200
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1320

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 2340
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 2460
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 2469

<210> 3652

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

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Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
					20					25				30	
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
					35					40				45	
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

50	55	60													
Lys	Ala	Asn	Pro	Lys	Glu	Val	Gly	Pro	Arg	Met	Gly	Phe	Phe	Leu	Ser
65				70						75					80
Leu	His	Gln	Arg	Gly	Leu	Thr	Val	Leu	Arg	Trp	Ser	Thr	Leu	Arg	Glu
				85					90					95	
Glu	Val	Asp	Leu	Ser	Pro	Ala	Pro	Glu	Ser	Glu	Val	Glu	Ala	Met	Arg
			100				105						110		
Ala	Asn	Leu	Gln	Glu	Leu	Asp	Gln	Phe	Leu	Gly	Pro	Tyr	Pro	Tyr	Ala
			115			120						125			
Thr	Leu	Lys	Lys	Trp	Ile	Ser	Leu	Thr	Asn	Phe	Ile	Ser	Glu	Ala	Thr
			130			135						140			
Val	Glu	Lys	Leu	Gln	Pro	Glu	Asn	Arg	Gln	Ile	Cys	Ala	Phe	Ser	Asp
145				150				155					160		
Val	Leu	Pro	Val	Leu	Ser	Met	Lys	His	Thr	Lys	Asp	Arg	Val	Gly	Gln
			165			170						175			
Asn	Leu	Pro	Arg	Cys	Gly	Ile	Glu	Cys	Lys	Ser	Tyr	Gln	Glu	Gly	Leu
			180			185			185			190			
Ala	Arg	Leu	Pro	Glu	Met	Lys	Pro	Arg	Ala	Gly	Thr	Glu	Ile	Arg	Phe
			195			200			200			205			
Ser	Glu	Leu	Pro	Thr	Gln	Met	Phe	Pro	Glu	Gly	Ala	Thr	Pro	Ala	Glu
			210			215			215			220			
Ile	Thr	Lys	His	Ser	Met	Asp	Leu	Ser	Tyr	Ala	Leu	Glu	Thr	Val	Leu
225				230			235					240			
Ile	Lys	Gln	Phe	Pro	Ser	Ser	Pro	Gln	Asp	Val	Leu	Gly	Glu	Leu	Gln
			245			250			250			255			
Phe	Ala	Phe	Val	Cys	Phe	Leu	Leu	Gly	Asn	Val	Tyr	Glu	Ala	Phe	Glu
			260			265			265			270			
His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met
			275			280			280			285			
Met	Lys	His	His	Thr	Leu	Tyr	Ile	Asn	Leu	Met	Ser	Ile	Leu	Tyr	His
			290			295			295			300			
Gln	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln
305				310			315			315			320		
Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys
			325			330			330			335			
Ser	Ile	Ala	Val	Asp	Ala	Thr	Leu	Arg	Lys	Lys	Ala	Glu	Lys	Phe	Gln
			340			345			345			350			
Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu
			355			360			360			365			
Asp	Cys	Ala	Pro	Val	Val	Val	Glu	Leu	Pro	Glu	Gly	Ile	Glu	Met	Gly
			370			375			375			380			

<210> 3653

<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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 120
 tcttcctccac tggagatgct cttcagctc agcaggacgc tagctcggaa ctcagactgc
 180

acattttgc ggattggag gagggccgac gccgtggccg gatagtctct ggagctgcct
240

tttgggggtg tttgcctgtt ggcatttca gtactccacg cgt
283

<210> 3654

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3654

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Ile Pro Ile Arg Ala Ser Phe Ala Ala Ala Glu Met Glu Arg Cys His
20 25 30

Gln Ala Val Phe Ser Thr Gly Asp Ala Pro Ser Ala Gln Gln Asp Ala
35 40 45

Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg
50 55 60

Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro
65 70 75 80

Val Gly Ile Phe Ser Thr Pro Arg
85

<210> 3655

<211> 3477

<212> DNA

<213> Homo sapiens

<400> 3655

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120

gagtgagagg ttgctctgg gcagctggag gaagaacagg gAACCTAGGG ttggggagag
180

atgtatagag gaaaactccc ccaggcacac agcctccgct ctggaccaac gcaggcttca
240

gtgagtacac acaaaggAAC tgatgtcaag gccctttca tgacccttcc cattctaga
300

agacctccc ccccagtcat cttggatct acagccacat gaaatacaga cacatcgTC
360

ccccaaGTCA ggccagTTT aggccattGA gttatggga aatgattaAT gggatGAATG
420

aaaaacAAAT aaaataAAATA aataaataAA tacactAAAG CCTTATTAGC caggcgtGAT
480

cacatGCCA acactcccCTT CCATCCCAGC actatgcaca GTTCACGGCT CATATGCAA
540

gtggaaAGACA CGTGGGACAA gagcaaAGCA caagtGACAC ATGGTCCCTC TCTAACACCT
600

cagcacacCCA accctgacGC TCCCATCACA gatgctGATC ATTCTCCAC GGACCCCCCTT
660

ttataataAT CCTCATTACAC ATTCTAGTT TCTGAGGGAA gagagAAAGA gaaAGGAAGA
720

agtggaaaagt gcggaacccc aatgagtagg gcacagaaaag gagggcgagc agagacagca
780
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840
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900
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960
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1020
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1200
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1260
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1380
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1440
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1620
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1920
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2040
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2160
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2220
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2280
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2340

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 2460
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 2520
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 2760
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 2820
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 2880
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 3240
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 3360
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 3477

<210> 3656

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

Met	Ala	Ser	Leu	Lys	Glu	Leu	Ala	Pro	Thr	Gly	Arg	Ile	Met	Asn	Ser
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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
					20				25				30		
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
					35				40				45		
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
					50			55				60			
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

65	70	75	80
Glu	Gln	Glu	Lys
Ile	Asp	Lys	Leu
Met	Ile	Glu	Met
Asp	Gly	Leu	Asp
Gly	Thr	Glu	Glu
85	90	95	
Asn	Lys	Ser	Lys
Phe	Gly	Ala	Asn
Ala	Asn	Ile	Leu
Gly	Val	Ser	Leu
100	105	110	
Val	Cys	Ala	Gly
Ala	Val	Glu	Lys
Gly	Val	Gly	Pro
115	120	125	
Ile	Ala	Asp	Leu
Ala	Gly	Asn	Ser
Glu	Val	Ile	Leu
Ile	Leu	Pro	Val
130	135	140	
Phe	Asn	Val	Ile
Ile	Asn	Gly	Gly
Gly	Ser	His	Ala
Ala	Gly	Asn	Lys
145	150	155	160
Gln	Glu	Phe	Met
Ile	Leu	Pro	Val
Gly	Ala	Ala	Asn
Asn	Phe	Arg	Glu
Gly	Ala		
165	170	175	
Met	Arg	Ile	Gly
Ala	Glu	Val	Tyr
His	Asn	Leu	Lys
Asn	Val	Ile	Lys
180	185	190	
Glu	Lys	Tyr	Gly
Lys	Asp	Ala	Thr
Asn	Val	Gly	Asp
Gly	Gly	Glu	Gly
195	200	205	
Ala	Pro	Asn	Ile
Ile	Leu	Glu	Asn
Asn	Gly	Leu	Gly
Gly	Leu	Glu	Leu
210	215	220	
Ala	Ile	Gly	Lys
Ala	Gly	Tyr	Thr
Tyr	Asp	Lys	Val
Val	Val	Ile	Gly
225	230	235	240
Val	Ala	Ala	Ser
Glu	Phe	Phe	Arg
Arg	Ser	Gly	Lys
Tyr	Asp	Leu	Asp
Phe			
245	250	255	
Lys	Ser	Pro	Asp
Asp	Asp	Pro	Ser
Ser	Arg	Tyr	Ile
Ile	Ser	Pro	Asp
Gln	Leu	Ala	
260	265	270	
Asp	Leu	Tyr	Lys
Lys	Ser	Phe	Ile
Ile	Lys	Asp	Tyr
Tyr	Pro	Val	Val
275	280	285	
Asp	Pro	Phe	Asp
Gln	Asp	Asp	Trp
Asp	Trp	Gly	Ala
Trp	Gly	Ala	Trp
290	295	300	
Ser	Ala	Gly	Ile
Ile	Gln	Val	Val
Gly	Asp	Gly	Asp
Asp	Asp	Leu	Thr
Leu	Thr	Val	Val
305	310	315	320
Lys	Arg	Ile	Ala
Ala	Gln	Ala	Val
Gln	Asn	Glu	Lys
Asn	Ser	Cys	Asn
Cys	Asn	Cys	Leu
325	330	335	
Leu	Lys	Val	Asn
Gln	Ile	Gly	Ser
Ile	Val	Thr	Glu
Gly	Ser	Leu	Gln
340	345	350	
Lys	Leu	Ala	Gln
Ala	Gln	Ala	Asn
Asn	Gly	Trp	Gly
Gly	Val	Met	Val
355	360	365	
Thr	Gly	Thr	Glu
Glu	Asp	Thr	Phe
Asp	Thr	Ile	Ala
Ile	Asp	Asp	Leu
Gly	Leu	Val	Val
370	375	380	
Thr	Gly	Gln	Ile
Gln	Ile	Lys	Thr
Ile	Gly	Ala	Pro
Gly	Ala	Pro	Cys
385	390	395	400
Lys	Tyr	Asn	Gln
Gln	Leu	Leu	Arg
Leu	Arg	Ile	Glu
Glu	Glu	Glu	Leu
405	410	415	
Lys	Phe	Ala	Gly
Gly	Arg	Asn	Phe
Arg	Asn	Pro	Leu
Asn	Phe	Ala	Lys
420	425		

<210> 3657

<211> 337

<212> DNA

<213> Homo sapiens

<400> 3657

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 120
 gtgcagatgt gtcacatgtt catttcggc tcaaggcgta cacgtgcagg tgtgttacgt
 180
 gttcattttc ggctcaaggc ttacacgtgc aggtgtgccca catgttcatt ttcggctcaa
 240
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 337

<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

Met	Cys	His	Met	Phe	Ile	Phe	Ser	Ser	Arg	Arg	Thr	Arg	Ala	Gly	Val
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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
									20	25			30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
								35	40			45			
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
							50	55			60				
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
							65	70		75			80		
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
							85			90			95		
Arg	Thr	Arg													

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 120
 gttgaaaata agacggccca gatattaaat cttcagcaac atttatctgc ccttgaaaaa
 180
 gatattaaac acaatgagga acttctaaa aggtgccaac tacattataa agaactaaag
 240
 atgaaaataa gaaaaatata ttctgaaatt cgggaacttg agaacataga agaacaccag
 300
 tctgttagata ttgcaacttt ggaagatgaa gctcaggaaa ataaaagcaa aatgaaaatg
 360
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 420
 gaagcagaaaa ataagtatga tgcaattaa ttcaaaaatta atcaactatac ggagctagca
 480

gaccactta aggatgaatt aaaccttgct gattctgaag tggataacca aaaacgaggg
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 600
 gaactggata tgaaagagaa agaactagag gagaaaaatgt cacaagcaag acaaatctgc
 660
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 720
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 780
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 840
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 900
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 1025

<210> 3660
 <211> 341
 <212> PRT
 <213> Homo sapiens

<400> 3660
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 20 25 30
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 35 40 45
 Leu Asn Leu Gln Gln His Leu Ser Ala Leu Glu Lys Asp Ile Lys His
 50 55 60
 Asn Glu Glu Leu Leu Lys Arg Cys Gln Leu His Tyr Lys Glu Leu Lys
 65 70 75 80
 Met Lys Ile Arg Lys Asn Ile Ser Glu Ile Arg Glu Leu Glu Asn Ile
 85 90 95
 Glu Glu His Gln Ser Val Asp Ile Ala Thr Leu Glu Asp Glu Ala Gln
 100 105 110
 Glu Asn Lys Ser Lys Met Lys Met Val Glu Glu His Met Glu Gln Gln
 115 120 125
 Lys Glu Asn Met Glu His Leu Lys Ser Leu Lys Ile Glu Ala Glu Asn
 130 135 140
 Lys Tyr Asp Ala Ile Lys Phe Lys Ile Asn Gln Leu Ser Glu Leu Ala
 145 150 155 160
 Asp Pro Leu Lys Asp Glu Leu Asn Leu Ala Asp Ser Glu Val Asp Asn
 165 170 175
 Gln Lys Arg Gly Lys Arg His Tyr Glu Lys Lys Gln Lys Glu His Leu
 180 185 190
 Asp Thr Leu Asn Lys Lys Lys Arg Glu Leu Asp Met Lys Glu Lys Glu
 195 200 205
 Leu Glu Glu Lys Met Ser Gln Ala Arg Gln Ile Cys Pro Glu Arg Ile

210	215	220
Glu	Val	Glu
Lys	Ser	Ser
Ala	Ile	Ile
Leu	Asp	Asp
Lys	Ile	Ile
Gln	Gln	Gln
Ile	Ala	Glu
Gly	His	His
Ala	Ser	Gly
His	Arg	Asp
Gly	Arg	Arg
Asp	Glu	Glu
225	230	235
240		
245	250	255
Ile	Met	Arg
Gln	Tyr	Gln
Gln	Glu	Ala
	Arg	Arg
	Glu	Thr
	Thr	Tyr
	Leu	Asp
	Asp	Leu
260	265	270
Ser	Lys	Val
Lys	Arg	Arg
Thr	Leu	Thr
Lys	Phe	Ile
	Lys	Lys
	Leu	Leu
	Gly	Glu
		Ile
275	280	285
Met	Glu	His
His	Arg	Phe
Phe	Lys	Thr
Thr	Tyr	Gln
Gln	Gln	Phe
		Arg
		Arg
		Cys
		Leu
		Thr
290	295	300
Leu	Arg	Cys
Cys	Lys	Lys
Leu	Tyr	Phe
Phe	Asp	Asn
Asn	Leu	Leu
Leu	Ser	Gln
Gln	Arg	Ala
		Tyr
305	310	315
320		
Cys	Gly	Lys
Lys	Met	Asn
Asn	Phe	Asp
Asp	His	Lys
Lys	Asn	Glu
		Thr
		Leu
		Ser
		Ile
		Ser
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Pro	Gly	Glu
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<210> 3661

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 3661
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120
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300
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360
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420
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480
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540
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600
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660
gaagaaaactg acaccccttcaataaaag ttattgtcaa gatccatccc caatgcctcc
720
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780
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840
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900

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 1020
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 1117

<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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Asp	His	Arg	Leu	Ser	Ile	Ser	Lys	Lys	Thr	Ala	Asn	Gly	Gly	Leu	Lys	
				20				25				30				
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys	
				35				40				45				
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala	
				50				55				60				
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val	
				65				70			75			80		
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr	
				85				90				95				
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala	
				100				105				110				
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr	
				115				120				125				
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr	
				130				135				140				
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp	
				145				150				155			160	
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu	
				165				170				175				
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile	
				180				185				190				
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile	
				195				200				205				
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val	
				210				215				220				
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly	
				225				230				235			240	
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr	
				245				250				255				
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp	
				260				265				270				
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser	
				275				280				285				
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr	
				290				295				300				
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn	

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Glu Ala Ile Val Lys Arg His Ile Leu Gly Ser Lys Leu Phe Tyr Lys			
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Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln			
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<211> 481

<212> DNA

<213> Homo sapiens

<400> 3663

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20	25	30	
Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr			
35	40	45	
Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp			
50	55	60	
Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val			
65	70	75	80
Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys			
85	90	95	
Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser			

100	105	110
Arg Asp Leu Ala Glu Gln Cys Val Lys Val Ser Ile Thr Tyr Trp Leu		
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Ile Thr Tyr Phe Ser Gln Thr Ser Gln Gly		
130	135	

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<212> DNA

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 Asn Thr Glu Arg Ile Tyr Ala Met Lys Ile Leu Asn Lys Trp Glu Met
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 Leu Lys Arg Ala Glu Thr Ala Cys Phe Arg Glu Glu Arg Asp Val Leu
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Glu Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu			
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Thr Tyr Gly Lys Ile Met Asn His Glu Glu Arg Phe Gln Phe Pro Ser			
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His Val Thr Asp Val Ser Glu Glu Ala Lys Asp Leu Ile Gln Arg Leu			
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Ile Cys Ser Arg Glu Arg Arg Leu Gly Gln Asn Gly Ile Glu Asp Phe			
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Pro Gly Ser His Thr Gly Phe Ser Gly Leu His Leu Pro Phe Ile Gly			
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Phe Thr Phe Thr Thr Glu Ser Cys Phe Ser Asp Arg Gly Ser Leu Lys			
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Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln			
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Glu Leu Glu Lys Lys Val Leu Phe Tyr Glu Glu Glu Leu Val Arg Arg		
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Glu Ala Ser His Val Leu Glu Val Lys Asn Val Lys Lys Glu Val His		
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Lys Asp Lys Leu Glu Lys Ser Lys Arg Glu Arg His Asn Glu Met Glu		
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Leu Phe Asp Glu Asn Lys Lys Leu Thr Ala Glu Asn Glu Lys Leu Cys		
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Ser Phe Val Asp Lys Leu Thr Ala Gln Asn Arg Gln Leu Glu Asp Glu		
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Leu Gln Asp Leu Ala Ala Lys Lys Glu Ser Val Ala His Trp Glu Ala		
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Gln Ile Ala Glu Ile Ile Gln Trp Val Ser Asp Glu Lys Asp Ala Arg		
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Gly Tyr Leu Gln Ala Leu Ala Ser Lys Met Thr Glu Glu Leu Glu Ala		
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Lys Lys Lys Met Glu Glu Lys Phe Arg Ala Asp Thr Gly Leu Lys Leu		
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Pro Asp Phe Gln Asp Ser Ile Phe Glu Tyr Phe Asn Thr Ala Pro Leu		
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Ser Leu Leu Ala Phe Trp Glu Glu Thr Ser Ser Ala Ser Glu Gln Glu		
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Thr Gln Ala Pro Lys Pro Glu Ala Ser Pro Ser Met Ser Val Ala Ala		
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Ser Glu Gln Gln Glu Asp Met Ala Arg Pro Pro Gln Arg Pro Ser Ala		
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Val Pro Leu Pro Thr Thr Gln Ala Leu Ala Leu Ala Gly Pro Lys Pro		
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Lys Ala His Gln Phe Ser Ile Lys Ser Phe Ser Ser Pro Thr Gln Cys		
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Ser His Cys Thr Ser Leu Met Val Gly Leu Ile Arg Gln Gly Tyr Ala		
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Cys Glu Val Cys Ser Phe Ala Cys His Val Ser Cys Lys Asp Gly Ala		
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Pro Gln Val Cys Pro Ile Pro Pro Glu Gln Ser Lys Arg Pro Leu Gly		

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Val Asp Val Gln Arg Gly Ile Gly Thr Ala Tyr Lys Gly His Val Lys		
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Val Pro Lys Pro Thr Gly Val Lys Lys Gly Trp Gln Arg Ala Tyr Ala		1120
1125	1130	1135
Val Val Cys Asp Cys Lys Leu Phe Leu Tyr Asp Leu Pro Glu Gly Lys		
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Ser Thr Gln Pro Gly Val Ile Ala Ser Gln Val Leu Asp Leu Arg Asp		
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Asp Glu Phe Ser Val Ser Val Leu Ala Ser Asp Val Ile His Ala		
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Thr Arg Arg Asp Ile Pro Cys Ile Phe Arg Val Thr Ala Ser Leu Leu		
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1205	1210	1215
Asn Glu Lys Arg Lys Trp Val Gly Ile Leu Glu Gly Leu Gln Ser Ile		
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1235	1240	1245
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Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
1285	1290	1295
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		
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Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		
1315	1320	1325
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		
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Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		
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Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
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Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		
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Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		
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Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		
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Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		
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Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		
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Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		
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Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

1525	1530	1535
Pro Arg Leu Ile Tyr Phe Lys Ser Lys Phe Ser Gly Ala Val Leu Asn		
1540	1545	1550
Val Pro Asp Thr Ser Asp Asn Ser Lys Lys Gln Met Leu Arg Thr Arg		
1555	1560	1565
Ser Lys Arg Arg Phe Val Phe Lys Val Pro Glu Glu Glu Arg Leu Gln		
1570	1575	1580
Gln Arg Arg Glu Met Leu Arg Asp Pro Glu Leu Arg Ser Lys Met Ile		
1585	1590	1595
Ser Asn Pro Thr Asn Phe Asn His Val Ala His Met Gly Pro Gly Asp		
1605	1610	1615
Gly Met Gln Val Leu Met Asp Leu Pro Leu Ser Ala Val Pro Pro Ser		
1620	1625	1630
Gln Glu Glu Arg Pro Gly Pro Ala Pro Thr Asn Leu Ala Arg Gln Pro		
1635	1640	1645
Pro Ser Arg Asn Lys Pro Tyr Ile Ser Trp Pro Ser Ser Gly Gly Ser		
1650	1655	1660
Glu Pro Ser Val Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln		
1665	1670	1675
Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro		
1685	1690	1695
Ser Asn Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His		
1700	1705	1710
Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr		
1715	1720	1725

<210> 3667

<211> 505

<212> DNA

<213> Homo sapiens

<400> 3667

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tgatattatG gatCCAATAA gtaAAATTCAt ggAAAGGAAG AAATTAAGG AAAGTGGAGGA
360
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<210> 3668

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3668

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Leu	Glu	Asp	Glu	Glu	Glu	Met	Trp	Phe	Asn	Thr	Asp	Glu	Asp	Asp	Met
	20							25					30		
Glu	Asp	Gly	Glu	Ala	Val	Val	Ser	Pro	Ser	Asp	Lys	Thr	Lys	Asn	Asp
	35							40			45				
Asp	Asp	Ile	Met	Asp	Pro	Ile	Ser	Lys	Phe	Met	Glu	Arg	Lys	Lys	Leu
	50						55			60					
Lys	Glu	Ser	Glu	Glu	Lys	Glu	Val	Leu	Leu	Lys	Thr	Asn	Leu	Ser	Gly
	65					70				75			80		
Arg	Gln	Ser	Pro	Ser	Phe	Lys	Leu	Ser	Leu	Ser	Ser	Gly	Thr	Lys	Thr
					85				90			95			
Asn	Leu	Thr	Ser	Gln	Ser	Ser	Thr	Thr	Asn	Leu	Pro	Gly	Ser	Pro	Gly
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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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240					
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300					
aagatggata	cttctgggtt	ttcatccatc	ttagtgacac	tgagcaaggc	agcagtggca
360					
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420					
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480					
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660					
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720					
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780					
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840					

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 960
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 1020
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 1080
 catgaactga aagaagagaa ccggactctg tggtgaaaa aactgttgcc tgaactttgt
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 1226

<210> 3670
 <211> 385
 <212> PRT
 <213> Homo sapiens

<400> 3670
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 Asn His Ser Leu Tyr Glu Asn Leu Asp Glu Glu Leu Asn Glu Glu Leu
 35 40 45
 Ala Ala Lys Val Val Gln Met Phe Tyr Val Ala Glu Pro Lys Gln Val
 50 55 60
 Pro His Ile Leu Cys Ser Pro Ser Met Lys Asn Ile Asn Pro Leu Thr
 65 70 75 80
 Ala Met Ser Tyr Leu Arg Lys Met Asp Thr Ser Gly Phe Ser Ser Ile
 85 90 95
 Leu Val Thr Leu Ser Lys Ala Ala Val Ala Leu Lys Met Gly Asp Leu
 100 105 110
 Asp Val Tyr Arg Asn Glu Met Lys Ser His Pro Glu Met Lys Leu Val
 115 120 125
 Cys Gly Phe Ile Leu Glu Pro Arg Leu Leu Ile Gln His Arg Lys Gly
 130 135 140
 Gln Ile Val Pro Thr Glu Leu Ala Thr His Leu Lys Glu Thr Gln Pro
 145 150 155 160
 Gly Leu Leu Val Ala Ser Val Leu Gly Leu Gln Lys Asn Ser Lys Ile
 165 170 175
 Gly Ile Glu Glu Ala Asp Ser Phe Phe Lys Val Leu Cys Gly Lys Asp
 180 185 190
 Glu Asp Thr Ile Pro Gln Leu Leu Ile Asp Phe Trp Glu Ala Gln Leu
 195 200 205
 Val Ala Cys Leu Pro Asp Val Val Leu Gln Glu Leu Phe Phe Lys Leu
 210 215 220
 Thr Ser Gln Tyr Ile Trp Arg Leu Ser Lys Arg Gln Pro Pro Asp Thr
 225 230 235 240
 Thr Pro Leu Arg Thr Ser Glu Asp Leu Ile Asn Ala Cys Ser His Tyr
 245 250 255
 Gly Leu Ile Tyr Pro Trp Val His Val Val Ile Ser Ser Asp Ser Leu

260	265	270
Ala Asp Lys Asn Tyr Thr Glu Asp Leu Ser Lys Leu Gln Ser Leu Ile		
275	280	285
Cys Gly Pro Ser Phe Asp Ile Ala Ser Ile Ile Pro Phe Leu Glu Pro		
290	295	300
Leu Ser Glu Asp Thr Ile Ala Gly Leu Ser Val His Val Leu Cys Arg		
305	310	315
Thr Arg Leu Lys Glu Tyr Glu Gln Cys Ile Asp Ile Leu Leu Glu Arg		320
325	330	335
Cys Pro Glu Ala Val Ile Pro Tyr Ala Asn His Glu Leu Lys Glu Glu		
340	345	350
Asn Arg Thr Leu Trp Trp Lys Lys Leu Leu Pro Glu Leu Cys Gln Arg		
355	360	365
Ile Lys Cys Gly Gly Glu Lys Tyr Gln Leu Tyr Leu Ser Ser Leu Lys		
370	375	380
Ala		
385		

<210> 3671
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3671
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aggcatctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcatggct
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420
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480
tacatacata agcatataga tacatatagc caaagttacc ttttaatga tctttttac
540
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600
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660
gttattggcc agtttttagc caatccaact gacctagtga aggtcagat gcaaatggaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
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828

<210> 3672

<211> 124
<212> PRT
<213> Homo sapiens

<400> 3672
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Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
35 40 45
Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
50 55 60
Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
65 70 75 80
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
85 90 95
Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
100 105 110
Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
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<210> 3673
<211> 1052
<212> DNA
<213> Homo sapiens

<400> 3673
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180
aaaacacatg gtggatcttcc aggaaggcaga ggatattattt ctatgtctt ccgaagttcc
240
acaaatgcattt atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
300
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360
gaacaagaaa agagacaacg agaaatttag cgcaatacat gcaagataaa attattctgt
420
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480
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660
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720
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780

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 960
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 1020
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 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr
			20				25					30			
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp
			35				40					45			
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly
			50				55					60			
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser
			65				70				75				80
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn
						85				90			95		
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu
			100				105					110			
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu
			115				120					125			
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr
			130				135					140			
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr
			145				150				155				160
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu
						165				170			175		
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His
			180				185					190			
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly
			195				200					205			
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	
			210				215					220			
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly
			225				230				235				240
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu
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Arg	Lys	Val	Phe	Phe	Leu	Leu									
			260												

<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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 gacagctata ttgtgcgtgt caaggctgtg gttatgacca gagatgactc cagcggggga
 180
 tggttcccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
 240
 gaaggcaatg gacgaagcgg ct当地tcatc catggtaac gacagaaaga caaactggtg
 300
 gtatttgaat gctatgttaag aaaggacttg gtctacacca aagccaatcc aacgtttcat
 360
 cactggaagg tcgataatag gaagtttggaa cttactttcc aaagccctgc ttagccccca
 420
 gc当地tgc当地 ggggagtaag gaaagcaatc gaagaccta tagaagaagt agaaaatgtat
 480
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 720
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<210> 3676

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3676

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														30		
Gln		Glu	Gly	Gly	Ile	Ser	Arg	Val	Gly	Val	Cys	Lys	Val	Met	His	
														45		
Pro		Glu	Gly	Asn	Gly	Arg	Ser	Gly	Phe	Leu	Ile	His	Gly	Glu	Arg	Gln
														60		
Lys		Asp	Lys	Leu	Val	Val	Leu	Glu	Cys	Tyr	Val	Arg	Lys	Asp	Leu	Val
														80		
Tyr		Thr	Lys	Ala	Asn	Pro	Thr	Phe	His	His	Trp	Lys	Val	Asp	Asn	Arg
														95		
Lys		Phe	Gly	Leu	Thr	Phe	Gln	Ser	Pro	Ala	Asp	Ala	Arg	Ala	Phe	Asp
														110		
Arg		Gly	Val	Arg	Lys	Ala	Ile	Glu	Asp	Leu	Ile	Glu	Glu	Val	Glu	Asn

115	120	125
Asp Ser Gly Gly Pro Arg Arg Leu Leu Ala Tyr Pro Leu Ser Ser Cys		
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Asn Gln Arg Pro Arg Val Tyr Ser Cys His		
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<210> 3677

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3677

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 418

<210> 3678

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3678

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20	25	30	
Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp			
35	40	45	.
Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His			
50	55	60	
Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser			
65	70	75	80
Ser Cys Pro Gly			
85	90	95	
Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu			
100	105	110	
Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser			
115	120	125	
Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala			
130	135		

<210> 3679

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3679
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 120
 gagatcgcag agatcaaggc ccagctggag acagccctga agtggaggaa ctatgaggtg
 180
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 240
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 360
 gccctttgt cctcggagac acaccaggag gaccccatca catataaggg ctttgtcac
 420
 aaggtaat tggaccgtgt caagctgagc tttccatga gcctcctgag ccgctttgtg
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<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680
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 Thr Ser Ile Phe Thr Ala Pro Lys Glu Ile Ala Glu Ile Lys Ala Gln
 35 40 45
 Leu Glu Thr Ala Leu Lys Trp Arg Asn Tyr Glu Val Lys Leu Arg Leu
 50 55 60
 Leu Leu His Leu Glu Glu Leu Gln Met Glu His Asp Ile Arg His Tyr
 65 70 75 80
 Asp Leu Glu Ser Val Pro Met Thr Trp Asp Pro Val Asp Gln Asn Pro
 85 90 95
 Arg Leu Leu Thr Leu Glu Val Pro Gly Val Thr Glu Ser Arg Pro Ser
 100 105 110
 Val Leu Arg Gly Asp His Leu Phe Ala Leu Leu Ser Ser Glu Thr His
 115 120 125
 Gln Glu Asp Pro Ile Thr Tyr Lys Gly Phe Val His Lys Val Glu Leu
 130 135 140
 Asp Arg Val Lys Leu Ser Phe Ser Met Ser Leu Leu Ser Arg Phe Val
 145 150 155 160
 Asp Gly Leu Thr Phe Lys Val Asn Phe Thr Phe Asn Arg Gln Pro Leu
 165 170 175
 Arg Val Gln His Arg Ala Trp Glu Leu Thr Gly Arg Trp

180

185

<210> 3681
 <211> 788
 <212> DNA
 <213> Homo sapiens

<400> 3681
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 120
 gagaccggga ggcagagctt cagcagctgc gggacagcct gggctgagc atggagcagc
 180
 gcggcggagg tcgcctgcga ggccgctggc caggcctgag cctctgccac catggccatt
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 gtgcagactc tgccagtgcc actggagcct gctcctgaag ctgcactgc cccacaagct
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 ccagtcatgg gtagtgtgag cagccttatac tcaggccggc cctgtcccg gggccagct
 360
 cctcccccgc accacggccc tcctggccc accttcttcc gccagcagga tggcctgcta
 420
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 480
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 540
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<210> 3682
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3682
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<211> 4421

<212> DNA

<213> Homo sapiens

<400> 3683

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 <212> PRT
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<400> 3684
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 245 250 255
 His Arg Arg Asn Thr Ser Thr Ser Ser Ala Ser Gly Gly Leu Gly
 260 265 270
 Met Thr Val Glu Gly Pro Glu Gly Ser Glu Arg Glu His Arg Pro Pro
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 Glu Lys Pro Pro Arg Pro Pro Arg Pro Leu His Leu Ser Asp Arg Ser
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 305 310 315 320
 Asp Thr Arg Ile Asp Ala Asp Ala Ile Val Glu Lys Ile Val Gln Ser

325 330 335
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<210> 3685
<211> 1293
<212> DNA
<213> Homo sapiens

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<210> 3686
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<210> 3687
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<212> DNA
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<210> 3688

<211> 57
<212> PRT
<213> Homo sapiens

<400> 3688
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<210> 3689
<211> 1562
<212> DNA
<213> Homo sapiens

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<210> 3690

<211> 504

<212> PRT

<213> Homo sapiens

<400> 3690

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Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
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Gly	Gly	Asp	Leu	Leu	Cys	Cys	Asp	His	Cys	Pro	Ala	Ala	Phe	His	Leu
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290	295	300
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340	345	350
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370	375	380
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<210> 3691

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3691

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<210> 3692
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3692
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 35 40 45
 Arg Ile Ala Arg Ile Arg Cys Gln Leu Lys Ala Val Cys Gln Pro Arg
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<210> 3693
 <211> 2641
 <212> DNA
 <213> Homo sapiens

<400> 3693
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2340

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<210> 3694
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 3694
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 35 40 45
 Ala Val Phe Ala Gly Met Lys Arg Pro Cys Glu Glu Thr Thr Ser Glu
 50 55 60
 Ser Asp Met Asp Glu Thr Ile Asp Val Gly Ser Glu Asn Asn Tyr Ser
 65 70 75 80
 Gly Gln Ser Thr Ser Ser Val Ile Arg Leu Asn Ser Pro Thr Thr Thr
 85 90 95
 Ser Gln Ile Met Ala Arg Lys Lys Arg Arg Gly Ile Ile Glu Lys Arg
 100 105 110
 Arg Arg Asp Arg Ile Asn Asn Ser Leu Ser Glu Leu Arg Arg Leu Val
 115 120 125
 Pro Thr Ala Phe Glu Lys Gln Gly Ser Ala Lys Leu Glu Lys Ala Glu
 130 135 140
 Ile Leu Gln Met Thr Val Asp His Leu Lys Met Leu Gln Ala Thr Gly
 145 150 155 160
 Gly Lys Gly Tyr Phe Asp Ala His Ala Leu Ala Met Asp Phe Met Ser
 165 170 175
 Ile Gly Phe Arg Glu Cys Leu Thr Glu Val Ala Arg Tyr Leu Ser Ser
 180 185 190
 Val Glu Gly Leu Asp Ser Ser Asp Pro Leu Arg Val Arg Leu Val Ser
 195 200 205
 His Leu Ser Thr Cys Ala Thr Gln Arg Glu Ala Ala Ala Met Thr Ser
 210 215 220
 Ser Met Ala His His Xaa Ser Ser Ala Pro Pro Ala Ser Leu Gly Arg
 225 230 235 240
 Arg Leu Pro Pro Pro Ala Arg Ser Pro Ala Pro Ala Gln Arg Pro Pro
 245 250 255
 Cys Leu Arg Val Asn Pro Leu Ser Pro Leu His Asn Phe Arg Ser Ala
 260 265 270
 Ser Ala His Gly Ser Ala Leu Leu Thr Ala Thr Phe Ala His Ala Asp

275	280	285
Ser Ala Leu Arg Met Pro Ser Thr Gly Ser Val Ala Pro Cys Val Pro		
290	295	300
Pro Leu Ser Thr Ser Leu Leu Ser Leu Ser Ala Thr Val His Ala Ala		
305	310	315
Ala Ala Ala Ala Thr Ala Ala Ala His Ser Phe Pro Leu Ser Phe Ala		
325	330	335
Gly Ala Phe Pro Met Leu Pro Pro Asn Ala Ala Ala Val Ala Ala		
340	345	350
Ala Thr Ala Ile Ser Pro Pro Leu Ser Val Ser Ala Thr Ser Ser Pro		
355	360	365
Gln Gln Thr Ser Ser Gly Thr Asn Asn Lys Pro Tyr Arg Pro Trp Gly		
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Thr Glu Val Gly Ala Phe		
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<210> 3695

<211> 1615

<212> DNA

<213> Homo sapiens

<400> 3695

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 180
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 gggagggaat aggtctttgg agggatgca agacaaaggt agacactgga taaagaaccc
 300
 ggttagtgccc aggtattacc ccatctggc cattactccc acactcagga accagacgtt
 360
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 1080
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<210> 3696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3696
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 Gly Cys Gly Gln Tyr Ile Ser Tyr Arg Cys Gln Glu Lys Arg Asn Thr
 20 25 30
 Tyr Phe Ala Glu Tyr Trp Tyr Gln Ala Gln Cys Cys Gln Tyr Asp Tyr
 35 40 45
 Cys Asn Ser Trp Ser Ser Pro Gln Leu Gln Ser Ser Leu Pro Glu Pro
 50 55 60
 His Asp Arg Pro Leu Ala Leu Pro Leu Ser Asp Ser Gln Ile Gln Trp
 65 70 75 80
 Phe Tyr Gln Ala Leu Asn Leu Ser Leu Pro Leu Pro Asn Phe His Ala
 85 90 95
 Gly Thr Glu Pro Asp Gly Leu Asp Pro Met Val Thr Leu Ser Leu Asn
 100 105 110
 Leu Gly Leu Ser Phe Ala Glu Leu Arg Arg Met Tyr Leu Phe Leu Asn
 115 120 125
 Ser Ser Gly Leu Leu Val Leu Pro Gln Ala Gly Leu Leu Thr Pro His
 130 135 140
 Pro Ser
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<210> 3697

<211> 550

<212> DNA

<213> Homo sapiens

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<210> 3698

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3698
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20 25 30
Ala Arg Gln Ser Trp Gly Gln Cys Gln Pro Val Cys Gln Pro Arg Cys
35 40 45
Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys Lys Cys His Pro Gly
50 55 60
Tyr Ala Gly Lys Thr Cys Asn Gln Asp Leu Asn Glu Cys Gly Leu Lys
65 70 75 80
Pro Arg Pro Cys Lys His Arg Cys Met Asn Thr Tyr Gly Ser Tyr Lys
85 90 95
Cys Tyr Cys Leu Asn Gly Tyr Met Leu Met Pro Asp Gly Ser Cys Ser
100 105 110
Ser Ala Leu Thr Cys Ser Met Ala Asn Cys Gln Tyr Gly Cys Asp Val
115 120 125
Val Lys Gly Gln Ile Arg Cys Gln Cys Pro Ser Pro Gly Leu Gln Leu
130 135 140
Ala Pro Asp Gly Arg Thr Cys Val Asp Val Asp Glu Cys Ala Thr Gly
145 150 155 160
Arg Ala Ser Cys Pro Lys Phe Arg Gln Cys Val Asn Thr Phe Gly Ser
165 170 175
Tyr Ile Cys Lys Cys His Lys
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<210> 3699
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<212> DNA
<213> Homo sapiens

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510

<210> 3700
<211> 127
<212> PRT
<213> Homo sapiens

<400> 3700
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Ala Val Asn Lys Val His Ala Phe Gly Lys Arg Gly Asn Ala Leu Arg
35 40 45
Arg Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln
50 55 60
Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser
65 70 75 80
Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu
85 90 95
Gly Ser Val Leu Leu Pro Ser Tyr Asn Ile Arg Pro Asp Gly Pro Gly
100 105 110
Ala Pro Arg Gly Arg Arg Phe Thr Phe Thr Ala Glu His Pro Gly
115 120 125

<210> 3701
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3701

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<210> 3702
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 3702
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 Ser Asn Leu Lys Glu His Lys Lys Thr His Thr Ala Asp Lys Val Phe
 35 40 45
 Thr Cys Asp Glu Cys Gly Lys Ser Phe Asn Met Gln Arg Lys Leu Val
 50 55 60
 Lys His Arg Ile Arg His Thr Gly Glu Arg Pro Tyr Ser Cys Ser Ala
 65 70 75 80
 Cys Gly Lys Cys Phe Gly Gly Ser Gly Asp Leu Arg Arg His Val Arg
 85 90 95
 Thr His Thr Gly Glu Lys Pro Tyr Thr Cys Glu Ile Cys Asn Lys Cys
 100 105 110
 Phe Thr Arg Ser Ala Val Leu Arg Arg His Lys Lys Met His Cys Lys
 115 120 125
 Ala Gly Asp Glu Ser Pro Asp Val Leu Glu Glu Leu Ser Gln Ala Ile
 130 135 140
 Glu Thr Ser Asp Leu Glu Lys Ser Gln Ser Ser Asp Ser Phe Ser Gln
 145 150 155 160
 Asp Thr Ser Val Thr Leu Met Pro Val Ser Val Lys Leu Pro Val His

165	170	175
Pro Val Glu Asn Ser Val Ala Glu Phe Asp Ser His Ser Gly Gly Ser		
180	185	190
Tyr Cys Lys Leu Arg Ser Met Ile Gln Pro His Gly Val Ser Asp Gln		
195	200	205
Glu Lys Leu Ser Leu Asp Pro Gly Lys Leu Ala Lys Pro Gln Ile His		
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His Thr Gln Pro His Ala Tyr Ser Tyr Ser Asp Phe		
225	230	235

<210> 3703

<211> 3294

<212> DNA

<213> Homo sapiens

<400> 3703

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1140 .

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2760

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<210> 3704
 <211> 619
 <212> PRT
 <213> Homo sapiens

<400> 3704
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 20 25 30
 Leu His Leu Leu Lys Ser Ser Cys Ala Pro Ser Val Gln Met Lys Ile
 35 40 45
 Lys Glu Leu Tyr Arg Arg Phe Pro Arg Lys Thr Leu Gly Pro Ser
 50 55 60
 Asp Leu Ser Leu Leu Ser Leu Pro Pro Gly Thr Ser Pro Val Gly Ser
 65 70 75 80
 Pro Gly Pro Leu Ala Pro Ile Pro Pro Thr Leu Leu Ala Pro Gly Thr
 85 90 95
 Leu Leu Gly Pro Lys Arg Glu Val Asp Met His Pro Pro Leu Pro Gln
 100 105 110
 Pro Val His Pro Asp Val Thr Met Lys Pro Leu Pro Phe Tyr Glu Val
 115 120 125
 Tyr Gly Glu Leu Ile Arg Pro Thr Thr Leu Ala Ser Thr Ser Ser Gln
 130 135 140
 Arg Phe Glu Glu Ala His Phe Thr Phe Ala Leu Thr Pro Gln Gln Val
 145 150 155 160
 Gln Gln Ile Leu Thr Ser Arg Glu Val Leu Pro Gly Ala Lys Cys Asp
 165 170 175
 Tyr Thr Ile Gln Val Gln Leu Arg Phe Cys Leu Cys Glu Thr Ser Cys
 180 185 190
 Pro Gln Glu Asp Tyr Phe Pro Pro Asn Leu Phe Val Lys Val Asn Gly
 195 200 205
 Lys Leu Cys Pro Leu Pro Gly Tyr Leu Pro Pro Thr Lys Asn Gly Ala
 210 215 220
 Glu Pro Lys Arg Pro Ser Arg Pro Ile Asn Ile Thr Pro Leu Ala Arg

225	230	235	240
Leu Ser Ala Thr Val Pro Asn Thr Ile Val Val Asn Trp Ser Ser Glu			
245	250	255	
Phe Gly Arg Asn Tyr Ser Leu Ser Val Tyr Leu Val Arg Gln Leu Thr			
260	265	270	
Ala Gly Thr Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile Arg Asn Pro			
275	280	285	
Asp His Ser Arg Ala Leu Ile Lys Glu Lys Leu Thr Ala Asp Pro Asp			
290	295	300	
Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met Cys Pro Leu			
305	310	315	320
Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr Cys Ala His			
325	330	335	
Leu Gln Ser Phe Asp Ala Ala Leu Tyr Leu Gln Met Asn Glu Lys Lys			
340	345	350	
Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser			
355	360	365	
Leu Ile Ile Asp Gly Leu Phe Met Glu Ile Leu Ser Ser Cys Ser Asp			
370	375	380	
Cys Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys Pro Met Lys			
385	390	395	400
Pro Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly Tyr Gly Leu			
405	410	415	
Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn			
420	425	430	
Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp			
435	440	445	
Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Ser Val Thr Ser Ala			
450	455	460	
Ala Ile Pro Ala Leu Pro Gly Ser Lys Gly Val Leu Thr Ser Gly His			
465	470	475	480
Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly			
485	490	495	
Asp Phe Leu Ser Ser Leu Pro Leu His Glu Tyr Pro Pro Ala Phe Pro			
500	505	510	
Leu Gly Ala Asp Ile Gln Gly Leu Asp Leu Phe Ser Phe Leu Gln Thr			
515	520	525	
Glu Ser Gln His Tyr Gly Pro Ser Val Ile Thr Ser Leu Asp Glu Gln			
530	535	540	
Asp Ala Leu Gly His Phe Phe Gln Tyr Arg Gly Thr Pro Ser His Phe			
545	550	555	560
Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Cys Ser Ala Thr			
565	570	575	
Pro Ala Pro Pro Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Gly			
580	585	590	
Ala Leu Arg Glu Gly His Gly Gly Pro Leu Pro Ser Gly Pro Ser Leu			
595	600	605	
Thr Gly Cys Arg Ser Asp Ile Ile Ser Leu Asp			
610	615		

<210> 3705

<211> 1737

<212> DNA

<213> Homo sapiens

<400> 3705
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120 tggtgtctgg cctggacggg gtgtggtcat cagcatggct gaaagaccag gcgggtccc
180 gcccccagga gagaccacag tccctgcaac ccagtcttc ttccatcatt attaatatta
240 tcttcatttc ttaaatataa ataccaaggc cccttctctg tgtcaggggg agaatgcagt
300 ggggatgagc cactagccat gggctccagc ctctcaggct tggggctgct gtgcggccaa
360 ccccgccca cagcagtagg ggactcctgg gcacccaagg caggtggcaa aaatagccgc
420 caaggccagg ggacagaggg ggggatggag gcgccggactg aggccggac agaggccggc
480 agagttgggg gagtgacggt ggagcaggga aagtccctca tcaactatga gcctcacggc
540 acacgtactg caggcttcac ggcacaccct cccaaaagca cgctcagtctg cgtgtgtnc
600 aggacgata tctgcacctg tgtgtgcattg tgtgtccgg aagtgtgtgcc caggcagcat
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720 acagcatatc tgtgcacatg tgtgtgtcca ggcaatatct gcacgtgtgt gagtgttgag
780 gcagcattat ctgtgtgtgt gtccaggagc atatctgcgt gcgtgtgtgt gtccnggaca
840 gcatatctgt gcatgcgtgt gtgtgtccgg acagcagtct gcgtgtgtgt gtgactagac
900 agcatatctg cgtgtgtcca ggcagcatat ctgcgcctgt gcacgtgtgt ctgaaagtgt
960 gtgtccggca gcatatctgc atgtgtgtgc gtgtccnaga cagcatatct gtgcacgcgt
1020 gtgtgtgtgt gtgtccaggc anatatccgt gcatgtgtgt gtcaaggcag cattatctgt
1080 gtgtccaggaa gcatatctgt gcacgtgtgt gtccggatac atatctgcac gtgtgtggc
1140 cagacagcat atccgtgtgt gtgtgtgtgt nccaggcagc acatctgcgc atgggtgtgc
1200 gtgnntgtat gttcaggcag catgtccttg tatgttctgg catgtctctg tgctgtgcg
1260 tgcatattggg cagcttatct gtgtgcccag gcggcatatc tgtgcattgtc cgtgtgtgc
1320 tacgtgtgcc ttnccaggag cacgtgtgcg cgcattgtgtc tgcatatcatg catccaggta
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1500 cccagtcgtc ctgtctggcc ggcccccccg tgcccaactgc agatacggtg ccgtctagca
1560

ctgatagtgg atgtgctggc ggaccttgcc ctccacgtgt gagtgtgtgt gagagtgtgt
 1620
 gtgtgtgtgt gtgtgtggat gtctgtgtag agtttgggtt acaacttagg gccagcaact
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 1737

<210> 3706
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 3706
 Met Gly Ser Ser Leu Ser Gly Leu Gly Leu Leu Cys Pro Gln Pro Gln
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 Pro Thr Ala Val Gly Asp Ser Trp Ala Pro Lys Ala Gly Gly Lys Asn
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 Ser Arg Gln Gly Gln Gly Thr Glu Ala Gly Met Glu Ala Gly Thr Glu
 35 40 45
 Ala Gly Thr Glu Ala Gly Arg Val Gly Gly Val Thr Val Glu Gln Gly
 50 55 60
 Lys Ser Leu Ile Asn Tyr Glu Pro His Gly Thr Arg Thr Ala Gly Phe
 65 70 75 80
 Thr Ala His Pro Pro Lys Ser Thr Ser Val Cys Val Cys Xaa Arg Gln
 85 90 95
 His Ile Cys Thr Cys Val Cys Met Cys Val Arg Lys Cys Val Pro Arg
 100 105 110
 Gln His Ile Cys Met Cys Ala Cys Val Cys Ile Arg Thr Ala Ile Cys
 115 120 125
 Thr Cys Val His Val Gln Thr Ala Tyr Leu Cys Thr Cys Val Cys Pro
 130 135 140
 Gly Asn Ile Cys Thr Cys Val Ser Val Glu Ala Ala Leu Ser Val Cys
 145 150 155 160
 Val Ser Arg Ser Ile Ser Ala Cys Val Cys Val Ser Xaa Thr Ala Tyr
 165 170 175
 Leu Cys Met Arg Val Cys Val Arg Thr Ala Val Cys Val Cys Val
 180 185 190

<210> 3707
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 3707
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 accaaaagcg tatgcgactt actgaagtgc aagatgataa agaggaggta ggatttcacc
 180
 tggcttcaac atgtgctagc tatcaatgtg atacattata tacaacaaaa ggaaagaaca
 240
 aaaatatggg gcatttcatt ggatgctgaa aatgcatttg ataacattca acttccctac
 300

atgataaaaa ccctcaagaa actgggtata gaaggaatgt atctcaacgt aataaaagcc
 360
 gtatatgaca gaccancagt tagtatcatc ctgaatgggg aaaatctaca agaactacaa
 420
 acctttggtt taagatctgg aacacaacaa ggctgccgc tttcaccaca gttactgaac
 480
 atagtactat aagtccctagc taggcgaatc agaggagaaa taaggggcat gcaaattggg
 540
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 585

<210> 3708

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3708
 Asp Phe Thr Trp Leu Gln His Val Leu Ala Ile Asn Val Ile His Tyr
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 Ile Gln Gln Lys Glu Arg Thr Lys Ile Trp Gly Ile Ser Leu Asp Ala
 20 25 30
 Glu Asn Ala Phe Asp Asn Ile Gln Leu Pro Tyr Met Ile Lys Thr Leu
 35 40 45
 Lys Lys Leu Gly Ile Glu Gly Met Tyr Leu Asn Val Ile Lys Ala Val
 50 55 60
 Tyr Asp Arg Pro Xaa Val Ser Ile Ile Leu Asn Gly Glu Asn Leu Gln
 65 70 75 80
 Glu Leu Gln Thr Phe Gly Leu Arg Ser Gly Thr Gln Gln Gly Cys Pro
 85 90 95
 Leu Ser Pro Gln Leu Leu Asn Ile Val Leu
 100 105

<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709
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 180
 ctgtaaagagt ttgatgtgaa acagattttg aaaatcagat ggaggtggtt tggcatcaa
 240
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 300
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 360
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 420
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 480

tggctggata gaccagaagt ggatgtatggc actagtgaag aagaaaatga atctgattcc
540
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tgtacatcag atgaattttt ccaagccctt aatcatgccg agcaaacatt taaaaaaaaatg
660
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720
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780
aatgtatgtca gagaaggcaag ataagaagac ataaaaatgg aagggttaga accaaattca
840
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900
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960
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1260
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1380
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1680
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1800
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1920
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1980
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2760
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2820
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3000
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3060
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3120
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3300
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3420
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3600
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3660
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3720

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3768

<210> 3710
<211> 70
<212> PRT
<213> Homo sapiens

<400> 3710
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Glu Gln Thr Phe Lys Lys Met Glu Asn Tyr Leu Arg His Lys Gln Leu
20 25 30
Cys Asp Val Ile Leu Val Ala Gly Asp Arg Arg Ile Pro Ala His Arg
35 40 45
Leu Val Leu Ser Ser Val Ser Asp Tyr Phe Ala Ala Met Phe Thr Asn
50 55 60
Asp Val Arg Glu Ala Arg
65 70

<210> 3711
<211> 1366
<212> DNA
<213> Homo sapiens

<400> 3711
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240
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480
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840

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 1020
 accctgcgtt accgcttcag cttccccat tccaagggtgg agctgttggc cttgctggat
 1080
 1140
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 1260
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 1366

<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712
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 Leu Gly Arg Gly Phe Asn Thr Gly Val Ile Leu Leu Arg Leu Asp Arg
 35 40 45
 Leu Arg Gln Ala Gly Trp Glu Gln Met Trp Arg Leu Thr Ala Arg Arg
 50 55 60
 Glu Leu Leu Ser Leu Pro Ala Ala Ser Leu Ala Asp Gln Asp Ile Phe
 65 70 75 80
 Asn Ala Val Ile Lys Glu His Pro Gly Leu Val Gln Arg Leu Pro Cys
 85 90 95
 Val Trp Asn Val Gln Leu Ser Asp His Thr Leu Ala Glu Arg Cys Tyr
 100 105 110
 Ser Glu Ala Ser Asp Leu Lys Val Ile His Trp Asn Ser Pro Lys Lys
 115 120 125
 Leu Arg Val Lys Asn Lys His Val Glu Phe Phe Arg Asn Phe Tyr Leu
 130 135 140
 Thr Phe Leu Glu Tyr Asp Gly Asn Leu Leu Arg Arg Glu Leu Phe Val
 145 150 155 160
 Cys Pro Ser Gln Pro Pro Gly Ala Glu Gln Leu Gln Ala Leu
 165 170 175
 Ala Gln Leu Asp Glu Glu Asp Pro Cys Phe Glu Phe Arg Gln Gln Gln
 180 185 190
 Leu Thr Val His Arg Val His Val Thr Phe Leu Pro His Glu Pro Pro
 195 200 205
 Pro Pro Arg Pro His Asp Val Thr Leu Val Ala Gln Leu Ser Met Asp
 210 215 220
 Arg Leu Gln Met Leu Glu Ala Leu Cys Arg His Trp Pro Gly Pro Met

225	230	235	240
Ser Leu Ala Leu Tyr	Leu Thr Asp Ala Glu Ala Gln Gln	Phe Leu His	
245	250	255	
Phe Val Glu Ala Ser Pro Val Leu Ala Ala Arg Gln Asp Val Ala Tyr			
260	265	270	
His Val Val Tyr Arg Glu Gly Pro Leu Tyr Pro Val Asn Gln Leu Arg			
275	280	285	
Asn Val Ala Leu Ala Gln Ala Leu Thr Pro Tyr Val Phe Leu Ser Asp			
290	295	300	
Ile Asp Phe Leu Pro Ala Tyr Ser Leu Tyr Asp Tyr Leu Arg Ala Ser			
305	310	315	320
Ile Glu Gln Leu Gly Leu Gly Ser Arg Arg Lys Ala Ala Leu Val Val			
325	330	335	
Pro Ala Phe Glu Thr Leu Arg Tyr Arg Phe Ser Phe Pro His Ser Lys			
340	345	350	
Val Glu Leu Leu Ala Leu Leu Asp Ala Gly Thr Leu Tyr Thr Phe Arg			
355	360	365	

<210> 3713

<211> 1719

<212> DNA

<213> Homo sapiens

<400> 3713

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 180
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 240
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 360
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 420
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 720
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 780
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 840
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 900

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 960
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 1140
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 1320
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 1380
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 1440
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 1620
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 1680
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 1719

<210> 3714
 <211> 488
 <212> PRT
 <213> Homo sapiens

<400> 3714
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 Thr Pro Val Gln Asp Glu Arg Asp Ser Gly Ser Asp Gly Glu Asp Asp
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 Val Asn Glu Gln His Ser Gly Ser Asp Thr Gly Ser Val Glu Arg His
 35 40 45
 Ser Glu Asn Glu Thr Ser Asp Arg Glu Asp Gly Pro Pro Lys Gly His
 50 55 60
 His Val Thr Asp Ser Glu Asn Asp Glu Pro Leu Asn Leu Asn Ala Ser
 65 70 75 80
 Asp Ser Glu Ser Glu Glu Leu His Arg Gln Lys Asp Ser Asp Ser Glu
 85 90 95
 Ser Glu Glu Arg Ala Glu Pro Pro Ala Ser Asp Ser Glu Asn Glu Asp
 100 105 110
 Val Asn Gln His Gly Ser Asp Ser Glu Ser Glu Glu Thr Arg Lys Leu
 115 120 125
 Pro Gly Ser Asp Ser Glu Asn Glu Glu Leu Leu Asn Gly His Ala Ser
 130 135 140
 Asp Ser Glu Asn Glu Asp Val Gly Lys His Pro Ala Ser Asp Ser Glu

145	150	155	160
Ile Glu Glu Leu Gln Lys Ser Pro Ala Ser Asp Ser Glu Thr Glu Asp			
165	170	175	
Ala Leu Lys Pro Gln Ile Ser Asp Ser Glu Ser Glu Glu Pro Pro Arg			
180	185	190	
His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met			
195	200	205	
Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser			
210	215	220	
Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu			
225	230	235	240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro			
245	250	255	
Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg			
260	265	270	
Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp			
275	280	285	
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser			
290	295	300	
Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala			
305	310	315	320
Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu			
325	330	335	
Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp			
340	345	350	
Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu			
355	360	365	
Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly			
370	375	380	
Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser			
385	390	395	400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp			
405	410	415	
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg			
420	425	430	
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu			
435	440	445	
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu			
450	455	460	
Ser Gly Asn Glu Glu Glu Asn Leu Ile Ala Asp Ile Phe Gly Glu Ser			
465	470	475	480
Gly Asp Glu Glu Glu Glu Phe			
485			

<210> 3715

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3715

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 accacatccc tggaggctcg aattattgcc ttgtctggca agatccgcag ttatgaagaa
 120

cacttggaga aacatcgaaa ggacaaagcc cacaaacgct atctgcta at gaggcattgac
 180
 cagagggaaaa agatgctcaa aaacacctcg aacaccaact atgatgtctt tgagaagata
 240
 tgctgggggc tgggaattga gtacaccc tc cccctctgt attaccgn
 288

<210> 3716
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 3716
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 Arg Val Lys Asp Thr Thr Ser Leu Glu Ala Arg Ile Ile Ala Leu Ser
 20 25 30
 Gly Lys Ile Arg Ser Tyr Glu Glu His Leu Glu Lys His Arg Lys Asp
 35 40 45
 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys
 50 55 60
 Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile
 65 70 75 80
 Cys Trp Gly Leu Gly Ile Glu Tyr Thr Phe Pro Pro Leu Tyr Tyr Arg
 85 90 95

<210> 3717
 <211> 1545
 <212> DNA
 <213> Homo sapiens

<400> 3717
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 tttcgccccca taaaattat taaaagctat ttatcgctt atgaacat ttagagggga
 120
 taacatggtc cctcacaaca tcccggagg acaaaaacat agcagattta ataatcta
 180
 ttagcaagat aaaagtgtgg attttgtga aaggtacaca ttttcttaa caagtaaaag
 240
 ttccagatca ttattgatat ttacttattt taaagtaaa gcattacaca ctcaacat
 300
 ggctgtatct gattttaaa cttcatccct aggattgata ttgctgtga tattataat
 360
 gccagtgaaa gtaacagaga ctgttcaaaa cctgtggcta gcactaattt agacaatgaa
 420
 gctatgcagc aagattgtgt atttgagaat gaagaaaata cccagtcgt aggtatattg
 480
 ttagagccat gcagtgaccg tggtgatagt gaagatggct gtcttgagag ggaagaatat
 540
 ttgttatttg acagtgataa attgtcacac ttgattctgg attcttagtag caagatatgt
 600
 gatttgaatg ccaacactga atcagaagta ccaggaggc agagtgtgg tggcaagg
 660

gaagcagcgt gtgtcagtat tccacattta gatctgaaga atgtttctga tggtgataaa
 720
 tgggaagagc catttcctgc tttaagtct tggcaggagg actctgagtc tggagaagct
 780
 cagctgtctc cacaagctgg aagaatgaat catcacccct tggaaagagga ctgtcctcca
 840
 gtattatcac accgcagttt agattttgtt caaagccagc gtttctaca tgatccagaa
 900
 aagttggatt cctcatctaa agcactgtct ttactagaa ttcgaagatc atccttagt
 960
 tcaaaaagatg aaaagagaga ggacagaaca ctttatcagc tggtaagaa acttcagaag
 1020
 aaaatcagac aatttgagga acagttgaa agggaaagaa atagcaagcc ctcctacagt
 1080
 gatattgctg ccaatccaaa ggtattaaaa tggatgacag agcttacaaa actgcggaag
 1140
 caaattaaag atgcaaaaca caaaaattct gatggagaat ttgtacctca gacacgtcca
 1200
 cgttagtaaca cacttccaaa aagcttggc tcttctctag accatgaaga tgaagagaat
 1260
 gaagatgaac ccaaggcat tcagaaggag aaaaaaccat ctaaagaagc aacccttcaa
 1320
 cttattctta aaagactgaa agaaaaacgt attgagaggt gtcttccaga agatatcaag
 1380
 aaaatgacca aagatcattt ggtagaagag aaagcttctc ttcagaaaag ttttcttac
 1440
 tatgaaagtc aacatggaag gccggtgacc aaggaagaaa ggcacattgt taaacctctc
 1500
 tatgatagat acaggcttgtt aaaacaaatg ctgacaagag ctgc
 1545

<210> 3718

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3718

Met	Gln	Gln	Asp	Cys	Val	Phe	Glu	Asn	Glu	Glu	Asn	Thr	Gln	Ser	Val
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Gly	Ile	Leu	Leu	Glu	Pro	Cys	Ser	Asp	Arg	Gly	Asp	Ser	Glu	Asp	Gly
															30
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
															45
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
															60
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65															80
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
															95
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
															110
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
															125
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

130	135	140													
Ser	Leu	Asp	Phe	Gly	Gln	Ser	Gln	Arg	Phe	Leu	His	Asp	Pro	Glu	Lys
145						150				155					160
Leu	Asp	Ser	Ser	Ser	Lys	Ala	Leu	Ser	Phe	Thr	Arg	Ile	Arg	Arg	Ser
										165		170			175
Ser	Phe	Ser	Ser	Lys	Asp	Glu	Lys	Arg	Glu	Asp	Arg	Thr	Pro	Tyr	Gln
										180		185			190
Leu	Val	Lys	Lys	Leu	Gln	Lys	Lys	Ile	Arg	Gln	Phe	Glu	Glu	Gln	Phe
										195		200			205
Glu	Arg	Glu	Arg	Asn	Ser	Lys	Pro	Ser	Tyr	Ser	Asp	Ile	Ala	Ala	Asn
										210		215			220
Pro	Lys	Val	Leu	Lys	Trp	Met	Thr	Glu	Leu	Thr	Lys	Leu	Arg	Lys	Gln
										225		230			240
Ile	Lys	Asp	Ala	Lys	His	Lys	Asn	Ser	Asp	Gly	Glu	Phe	Val	Pro	Gln
										245		250			255
Thr	Arg	Pro	Arg	Ser	Asn	Thr	Leu	Pro	Lys	Ser	Phe	Gly	Ser	Ser	Leu
										260		265			270
Asp	His	Glu	Asp	Glu	Glu	Asn	Glu	Asp	Glu	Pro	Lys	Val	Ile	Gln	Lys
										275		280			285
Glu	Lys	Lys	Pro	Ser	Lys	Glu	Ala	Thr	Leu	Glu	Leu	Ile	Leu	Lys	Arg
										290		295			300
Leu	Lys	Glu	Lys	Arg	Ile	Glu	Arg	Cys	Leu	Pro	Glu	Asp	Ile	Lys	Lys
										305		310			320
Met	Thr	Lys	Asp	His	Leu	Val	Glu	Glu	Lys	Ala	Ser	Leu	Gln	Lys	Ser
										325		330			335
Leu	Leu	Tyr	Tyr	Glu	Ser	Gln	His	Gly	Arg	Pro	Val	Thr	Lys	Glu	Glu
										340		345			350
Arg	His	Ile	Val	Lys	Pro	Leu	Tyr	Asp	Arg	Tyr	Arg	Leu	Val	Lys	Gln
										355		360			365
Met	Leu	Thr	Arg	Ala	Ser										
															370

<210> 3719
<211> 422
<212> DNA
<213> Homo sapiens

<400> 3719
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ttttgggctt ggctgctccg tgggttgatc ttgcgcgtt tgcctgggtc ctacatgggt
120
ggccaaccag aaccccggtt gggaaagaat aaccaaaaaa agttttagtg caacagtaga
180
cagccccgtt gcaaaaatgt gtgtttgat gacttcttcc ccatttccca agtcagactt
240
tggcccttac aactgataat ggtctccaca ctttcacttc tggtggttt acatgttagcc
300
tatcatgagg gtagagagaa aaggcacaga aagaaaactct atgtcagccc aggtacaatg
360
gatgggggcc tatggtaacgc ttatcttatac agcctcattg ttaaaaactgg ttttgaaacn
420
nn
422

<210> 3720
<211> 122
<212> PRT
<213> Homo sapiens

<400> 3720
Met Gly Phe Trp Ala Trp Leu Leu Arg Gly Leu Ile Phe Arg Gly Leu
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Pro Gly Ser Tyr Met Gly Gly Gln Pro Glu Pro Arg Val Gly Lys Asn
20 25 30
Asn Gln Lys Lys Phe Glu Cys Asn Ser Arg Gln Pro Gly Cys Lys Asn
35 40 45
Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
50 55 60
Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His
65 70 75 80
Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
85 90 95
Val Ser Pro Gly Thr Met Asp Gly Gly Leu Trp Tyr Ala Tyr Leu Ile
100 105 110
Ser Leu Ile Val Lys Thr Gly Phe Glu Thr
115 120

<210> 3721
<211> 4728
<212> DNA
<213> Homo sapiens

<400> 3721
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120
cccacccgaca tggctcgccg gcagcagaag atcagcaaac agcagctgca gacagtcaag
180
gaccggtttc aggcttcctt caatggggaa acccagatca tggctgacga agcattcatg
240
aacgctgtgc agagttacta tgaggtgttc ctgaagagcg accgtgtggc ccgcattgtt
300
cagagtggag gctgttccgc caacgactcc cgggagggtct tcaagaagca cattgagaag
360
agagtgcgca gcctgcctga gattgacggc ctcagcaagg agactgtgtct gagcteetgg
420
atggccaaat ttgatgccat ctaccgtgga gaagaggacc cgccgaagca gcaggccccgg
480
atgacagcca ggcgcggcctc cgagctgatt ctgagcaagg agcaactcta tgagatgttc
540
cagaacatcc ttgggatcaa gaagttcgaa catcagctcc tttacaatgc ctgccagctg
600
gacaatccag atgagcaagc agcccagatc agacgagagc tggatggacg tctacaaatg
660
gcagacccaaa tagccagggc acgcaaaattt cccaaatgg tatccaaaga aatggaaaac
720

atgtacattg aggagctgaa gtcatctgtc aacctgctca tggccaactt ggagagcatg
780
ccggtatcca aaggcgaaaa gttcaagctc cagaaactca aacgcagcca caatgcttcc
840
atcatcgaca tggcgagga gagtgagaac cagctctcca agtcagatgt cgtgctgtct
900
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960
atcgatatatt gcacaatgga ggtgaaagga ggagagaaaac tacagactga tcagggcgag
1020
gcttctaaac caacctgggg cacccagggt gacttctcca caacccatgc actgccagct
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1140
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1200
acagtctcca aaaactgccc caaccaagat ctcaaaatca aacttgcgtt ccgaatggat
1260
aagcctcaaa acatgaagca ttctgggtat ttatggcca tcggtaagaa tgtctggaaag
1320
agatgaaaga aaagggtttt tgtattgggtg caggtcagtc agtacacggt tgccatgtgc
1380
agttatcggg agaagaaagc ggagcctcag gaacttctac aattggatgg ctacactgtg
1440
gattacaccg acccccagcc aggtttggag ggtggccgag cttcttcaa tgctgtcaag
1500
gagggagaca ccgtgatatt tgccagtgac gatgaacaag accgcattct gtgggtccag
1560
ccatgttac gggccacggg gcagtcacac aagcctgtgc cccgaccca agtccagaaa
1620
ctcaacgcca agggaggaaa tgtacctcag ctggatgccc ctatctctca attttctgga
1680
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1740
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1800
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1860
gagtattgcg cccgaaatgg agtccggggg tgcacccgac atctctgtca cttcagagac
1920
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1980
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2040
gaagaaaagg aacgtttga agaaatcaa gagaggctcc gagttctgtc agaaaatcag
2100
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2160
ctctcactct tggaaagggt tttgtatgaaa gatattgtta ccccagtgcc acaagaggag
2220
gtaaaaacag ttatccgtaa atgtctggaa caggctgcgt tagtcaacta ttctcggtc
2280
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2340

actcctgccaaaaaagcttga agatacaata cgtcttgcgtg aactagtcat tgaagttctt
2400
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2460
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2520
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2700
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2820
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2880
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2940
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3060
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3120
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3180
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3240
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3300
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3360
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3420
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3540
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3660
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3720
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3780
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3840
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3900
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3960

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 4020
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 4080
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 4140
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 4200
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 4260
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 4320
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 4380
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 4440
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 4500
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 4560
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 4620
 catcttgctt ttgccttata taaAGCCTAC agttatggaa gtgtggaaaa ctgtggcttc
 4680
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 4728

<210> 3722
<211> 1216
<212> PRT
<213> Homo sapiens

<400> 3722
Ser Glu Lys Glu Lys Glu Glu Leu Glu Arg Leu Gln Lys Glu Glu Glu
1 5 10 15
Glu Arg Lys Lys Arg Leu Gln Leu Tyr Val Phe Val Met Arg Cys Ile
20 25 30
Ala Tyr Pro Phe Asn Ala Lys Gln Pro Thr Asp Met Ala Arg Arg Gln
35 40 45
Gln Lys Ile Ser Lys Gln Gln Leu Gln Thr Val Lys Asp Arg Phe Gln
50 55 60
Ala Phe Leu Asn Gly Glu Thr Gln Ile Met Ala Asp Glu Ala Phe Met
65 70 75 80
Asn Ala Val Gln Ser Tyr Tyr Glu Val Phe Leu Lys Ser Asp Arg Val
85 90 95
Ala Arg Met Val Gln Ser Gly Gly Cys Ser Ala Asn Asp Ser Arg Glu
100 105 110
Val Phe Lys Lys His Ile Glu Lys Arg Val Arg Ser Leu Pro Glu Ile
115 120 125
Asp Gly Leu Ser Lys Glu Thr Val Leu Ser Ser Trp Met Ala Lys Phe
130 135 140
Asp Ala Ile Tyr Arg Gly Glu Glu Asp Pro Arg Lys Gln Gln Ala Arg
145 150 155 160
Met Thr Ala Ser Ala Ala Ser Glu Leu Ile Leu Ser Lys Glu Gln Leu

165	170	175
Tyr Glu Met Phe Gln Asn Ile Leu Gly Ile Lys Lys Phe Glu His Gln		
180	185	190
Leu Leu Tyr Asn Ala Cys Gln Leu Asp Asn Pro Asp Glu Gln Ala Ala		
195	200	205
Gln Ile Arg Arg Glu Leu Asp Gly Arg Leu Gln Met Ala Asp Gln Ile		
210	215	220
Ala Arg Glu Arg Lys Phe Pro Lys Phe Val Ser Lys Glu Met Glu Asn		
225	230	235
Met Tyr Ile Glu Glu Leu Lys Ser Ser Val Asn Leu Leu Met Ala Asn		
245	250	255
Leu Glu Ser Met Pro Val Ser Lys Gly Gly Glu Phe Lys Leu Gln Lys		
260	265	270
Leu Lys Arg Ser His Asn Ala Ser Ile Ile Asp Met Gly Glu Glu Ser		
275	280	285
Glu Asn Gln Leu Ser Lys Ser Asp Val Val Leu Ser Phe Ser Leu Glu		
290	295	300
Val Val Ile Met Glu Val Gln Gly Leu Lys Ser Leu Ala Pro Asn Arg		
305	310	315
Ile Val Tyr Cys Thr Met Glu Val Glu Gly Gly Glu Lys Leu Gln Thr		
325	330	335
Asp Gln Ala Glu Ala Ser Lys Pro Thr Trp Gly Thr Gln Gly Asp Phe		
340	345	350
Ser Thr Thr His Ala Leu Pro Ala Val Lys Val Lys Leu Phe Thr Glu		
355	360	365
Ser Thr Gly Val Leu Ala Leu Glu Asp Lys Glu Leu Gly Arg Val Ile		
370	375	380
Leu His Pro Thr Pro Asn Ser Pro Lys Gln Ser Glu Trp His Lys Met		
385	390	395
Thr Val Ser Lys Asn Cys Pro Asn Gln Asp Leu Lys Ile Lys Leu Ala		
405	410	415
Val Arg Met Asp Lys Pro Gln Asn Met Lys His Ser Gly Tyr Leu Trp		
420	425	430
Ala Ile Gly Lys Asn Val Trp Lys Arg Trp Lys Lys Arg Phe Phe Val		
435	440	445
Leu Val Gln Val Ser Gln Tyr Thr Phe Ala Met Cys Ser Tyr Arg Glu		
450	455	460
Lys Lys Ala Glu Pro Gln Glu Leu Leu Gln Leu Asp Gly Tyr Thr Val		
465	470	475
Asp Tyr Thr Asp Pro Gln Pro Gly Leu Glu Gly Gly Arg Ala Phe Phe		
485	490	495
Asn Ala Val Lys Glu Gly Asp Thr Val Ile Phe Ala Ser Asp Asp Glu		
500	505	510
Gln Asp Arg Ile Leu Trp Val Gln Ala Met Tyr Arg Ala Thr Gly Gln		
515	520	525
Ser His Lys Pro Val Pro Pro Thr Gln Val Gln Lys Leu Asn Ala Lys		
530	535	540
Gly Gly Asn Val Pro Gln Leu Asp Ala Pro Ile Ser Gln Phe Ser Gly		
545	550	555
Leu Lys Asp Ala Asp Arg Ala Gln Lys His Gly Met Asp Glu Phe Ile		
565	570	575
Ser Ser Asn Pro Cys Asn Phe Asp His Ala Ser Leu Phe Glu Met Val		
580	585	590
Gln Arg Leu Thr Leu Asp His Arg Leu Asn Asp Ser Tyr Ser Cys Leu		

595	600	605
Gly Trp Phe Ser Pro Gly Gln Val Phe Val Leu Asp Glu Tyr Cys Ala		
610	615	620
Arg Asn Gly Val Arg Gly Cys His Arg His Leu Cys Tyr Leu Arg Asp		
625	630	635
Leu Leu Glu Arg Ala Glu Asn Gly Ala Met Ile Asp Pro Thr Leu Leu		
645	650	655
His Tyr Ser Phe Ala Phe Cys Ala Ser His Val His Gly Asn Arg Pro		
660	665	670
Asp Gly Ile Gly Thr Val Thr Val Glu Glu Lys Glu Arg Phe Glu Glu		
675	680	685
Ile Lys Glu Arg Leu Arg Val Leu Leu Glu Asn Gln Ile Thr His Phe		
690	695	700
Arg Tyr Cys Phe Pro Phe Gly Arg Pro Glu Gly Ala Leu Lys Ala Thr		
705	710	715
Leu Ser Leu Leu Glu Arg Val Leu Met Lys Asp Ile Val Thr Pro Val		
725	730	735
Pro Gln Glu Glu Val Lys Thr Val Ile Arg Lys Cys Leu Glu Gln Ala		
740	745	750
Ala Leu Val Asn Tyr Ser Arg Leu Ser Glu Tyr Ala Lys Ile Glu Glu		
755	760	765
Asn Gln Lys Asp Ala Glu Asn Val Gly Arg Leu Ile Thr Pro Ala Lys		
770	775	780
Lys Leu Glu Asp Thr Ile Arg Leu Ala Glu Leu Val Ile Glu Val Leu		
785	790	795
Gln Gln Asn Glu Glu His His Ala Glu Pro His Val Asp Lys Gly Glu		
805	810	815
Ala Phe Ala Trp Trp Ser Asp Leu Met Val Glu His Ala Glu Thr Phe		
820	825	830
Leu Ser Leu Phe Ala Val Asp Met Asp Ala Ala Leu Glu Val Gln Pro		
835	840	845
Pro Asp Thr Trp Asp Ser Phe Pro Leu Phe Gln Leu Leu Asn Asp Phe		
850	855	860
Leu Arg Thr Asp Tyr Asn Leu Cys Asn Gly Lys Phe His Lys His Leu		
865	870	875
Gln Asp Leu Phe Ala Pro Leu Val Val Arg Tyr Val Asp Leu Met Glu		
885	890	895
Ser Ser Ile Ala Gln Ser Ile His Arg Gly Phe Glu Arg Glu Ser Trp		
900	905	910
Glu Pro Val Asn Asn Gly Ser Gly Thr Ser Glu Asp Leu Phe Trp Lys		
915	920	925
Leu Asp Ala Leu Gln Thr Phe Ile Arg Asp Leu His Trp Pro Glu Glu		
930	935	940
Glu Phe Gly Lys His Leu Glu Gln Arg Leu Lys Leu Met Ala Ser Asp		
945	950	955
Met Ile Glu Ser Cys Val Lys Arg Thr Arg Ile Ala Phe Glu Val Lys		
965	970	975
Leu Gln Lys Thr Ser Arg Ser Thr Asp Phe Arg Val Pro Gln Ser Ile		
980	985	990
Cys Thr Met Phe Asn Val Met Val Asp Ala Lys Ala Gln Ser Thr Lys		
995	1000	1005
Leu Cys Ser Met Glu Met Gly Gln Glu Phe Ala Lys Met Trp His Gln		
1010	1015	1020
Tyr His Ser Lys Ile Asp Glu Leu Ile Glu Glu Thr Val Lys Glu Met		

1025	1030	1035	1040
Ile Thr Leu Leu Val Ala Lys Phe Val Thr Ile Leu Glu Gly Val Leu			
1045	1050	1055	
Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu			
1060	1065	1070	
Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro			
1075	1080	1085	
Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln			
1090	1095	1100	
Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu			
1105	1110	1115	1120
Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu			
1125	1130	1135	
Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu			
1140	1145	1150	
Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val			
1155	1160	1165	
Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg			
1170	1175	1180	
Leu Thr Val Glu Glu Ala Thr Ala Ser Val Ser Glu Gly Gly Leu			
1185	1190	1195	1200
Gln Gly Ile Ser Met Lys Asp Ser Asp Glu Glu Asp Glu Asp Asp			
1205	1210	1215	

<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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120
aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgaggta
180
gtgaattatg accaaatctc cgataagaca gacatgtgaa gtatgggggt gatcacctac
240
atgctgtga gcccccttc ccccttcctg ggagatgatg acacagagac cctaaacaac
300
gttcttatctg gcaactggta ctttcatgaa gagacctttg aggccgtatc agacgaggcc
360
aaagactttg tctccaaacct catcgtaag gaccagaggg cccggatgaa cgctgcccaag
420
tgtctcgccc atccctggct caacaacctg gcgagaaaag ccaaacgctg taaccgacgc
480
cttaagtccc agatcttgc taagaatac ctcataaaga ggcgtggaa gaaaaacttc
540
atcgctgtca gcgctgcca ccgcttcaag aagatcagca gctcgggggc actgtatggct
600
ctgggggtct gagccctggg cgcaatgtaa gcctggacgc agccacacag tggccggggc
660
tgaagccaca cagccagaa ggccagaaaa ggcagccaga tccccagggc agcctcgta
720

ggacaaggct gtgccaggct gggaggctcg gggctcccca cgcggccatg cagtgaccgc
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830

<210> 3724

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3724

Ile Leu Leu Met His Lys Met Arg Val Leu His Leu Asp Leu Lys Pro
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Glu Asn Ile Leu Cys Val Asn Thr Thr Gly His Leu Val Lys Ile Ile
 20 25 30

Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val
 35 40 45

Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp
 50 55 60

Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr
 65 70 75 80

Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu
 85 90 95

Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Thr
 100 105 110

Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile
 115 120 125

Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His
 130 135 140

Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg
 145 150 155 160

Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp
 165 170 175

Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile
 180 185 190

Ser Ser Ser Gly Ala Leu Met Ala Leu Gly Val
 195 200

<210> 3725

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 3725

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tctgctcatg gcttatcagt ctgaatctg cggatggaa gagagctgga tttcagatct
 120

gaccatcttc actttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt
 180

gataaaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcaccccttt
 240

ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgcc
 300

accctgttgc attttgcgtc gaagtatgga ctgaagaacc tcactgcctt gttgctcacc
360
tgcccaggag ccctgcaggc gtacagcgtg gccaacaaggc atggccacta ccccaacacc
420
atcgctgaga aacacggctt cagggacctg cggcagttca tcgacgagta tgtggaaacg
480
gtggacatgc tcaagagtca cattaaagag gaactgatgc acggggagga ggctgatgct
540
gtgtacgagt ccatggccca cctttccaca gacctgctta tgaaatgctc gctcaacccc
600
ggctgtgacg aggatctcta tgagtccatg gctgcctttg tcccagctgc cactgaagac
660
ctctatgttg aaatgcttca ggccagtaca tctaacccaa tccctggaga tggtttctct
720
cgggccacta aggactctat gatccgcaag ttttagaag gcaacagcat gggaaatgacc
780
aatctggaga gagatcagtg ccatcttggc caggaagaag atgtttatca cacggtgttat
840
gacgatgagg cctttctgt ggacttggcc agcaggcccc ctgtcccagt gcccagacca
900
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960
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1020
gatgacctgg cttttgaac cattgctcag agactatccc cttctaaatg gtctcaccc
1080
agccctacga gacagggttc atatcctggg gccagattct ggagctagaa taggagtaat
1140
gaccagagtc agtgctggcc ttccctggaaag tatttacgca cagttgcaaaa ggcaggtaaa
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1244

<210> 3726
<211> 325
<212> PRT
<213> *Homo sapiens*

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<400> 3726
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Gly His Val Ile Ser Ala His Gly Leu Ser Val Leu Asn Leu Arg Asp
      20          25                  30
Gly Arg Glu Leu Asp Phe Arg Ser Asp His Leu His Phe Cys Phe Gln
      35          40                  45
Ala Phe Lys Ile Val Pro Tyr Asn Thr Glu Thr Leu Asp Lys Leu Leu
      50          55                  60
Thr Glu Ser Leu Lys Asn Asn Ile Pro Ala Ser Gly Leu His Leu Phe
      65          70                  75                  80
Gly Ile Asn Gln Leu Glu Glu Asp Met Met Thr Asn Gln Arg Asp
      85          90                  95
Glu Glu Leu Pro Thr Leu Leu His Phe Ala Ala Lys Tyr Gly Leu Lys
      100         105                 110
Asn Leu Thr Ala Leu Leu Thr Cys Pro Gly Ala Leu Gln Ala Tyr

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115	120	125
Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys		
130	135	140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr		
145	150	160
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu		
165	170	175
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu		
180	185	190
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu		
195	200	205
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu		
210	215	220
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser		
225	230	235
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser		
245	250	255
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu		
260	265	270
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp		
275	280	285
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala		
290	295	300
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly		
305	310	315
Lys Tyr Gly Arg Glu		320
	325	

<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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120
ctcgaccccg ctgagaaaaca agaaacagggc tgcctccctt tgggtctgga gtccctgcga
180
gtttcagata gccggcttga ggcattccagc agccagtcct ttggcttgg accacaccga
240
ggacggctca acattcagtc aggctggag gacggcgatc tatatgatgg agcctggtgt
300
gctgaggagc aggacgcccga tccatggttt caggtggacg ctggcaccc cacccgcctc
360
tcgggtgtta tcacacaggg caggaactct gtctggaggt atgactgggt cacatcatac
420
aagggtccagt tcagcaatga cagtcggacc tggtgaaa gtaggaacca cagcagtggg
480
atggacgcag tatttcctgc caattcagac ccagaaactc cagtgcgaa cctcctgcgc
540
gagccccagg tggcccgctt cattcgcctg ctgccccaga cctggctcca gggaggcgcg
600

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ccttgccctcc gggcagagat cctggccctgc
630

<210> 3728
<211> 210
<212> PRT
<213> Homo sapiens

<400> 3728
Arg Ile Arg Val Ile Lys Lys Lys Val Ile Met Lys Lys Arg Lys
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Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu
20 25 30
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu
35 40 45
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser
50 55 60
Arg Leu Glu Ala Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg
65 70 75 80
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp
85 90 95
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val
100 105 110
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg
115 120 125
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe
130 135 140
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly
145 150 155 160
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu
165 170 175
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro
180 185 190
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu
195 200 205
Ala Cys
210

<210> 3729
<211> 1552
<212> DNA
<213> Homo sapiens

<400> 3729
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cctccctccgc gcctcgccgc atggagtaga aaggggaccgc ggaagccccga aagcgaaggc
120
atcaagttat cagcagatgt caaacattt gtccccagat ttgccgggtt caatgtggca
180
tggtagagt cctcagaagc atgtgtcttc cccagctctg cagccacata ctatccgttt
240
gttcaggaac caccagtgac agagcagaaa atatatactg aagacatggc ctttggagct
300

tcaactttc cacctagta tttatcttct gagataactc ttcatccata tgccatttct
 360
 ccttatacccttgactccac acagaatgtt tactcagtgc ctggctccca gtatctttat
 420
 accaaccacca gttgttacccg aggtttcaa acagtgaagc atcgaaatga gaacacatgc
 480
 cctctccac aagaaatgaa agctctgttt aagaagaaaa cctatgatga gaaaaaaaaacg
 540
 tatgatcagc aaaagttga cagtgaaagg gctgatggaa ctatatcatc tgagataaaa
 600
 tcagcttagag gttcacatca tttgtccatt tacgctgaga atagttgaa atcagatggt
 660
 taccataagc gaacagacag gaaatccaga atcattgaa aaaatgtatc tacctccaaa
 720
 cctgagtttgcatttaccac actggacttt cctgaactgc aaggtgcaga gaacaatatg
 780
 tcagagatac agaagcaacc caagtgggca cctgtccact ctgtctctac cgacatttct
 840
 cttctaagag aagtagtaaa accagctgca gtgttatcaa agggtgaaat agtggtgaaa
 900
 aataaccacca atgaatctgt aactgctaat gccgctacca atttccttc atgtacaaga
 960
 gagttatctt ggacaccaat gggttatgtt gttcgacaga cattatctac agaactgtca
 1020
 gcagcccccta aaaatgttac ttctatgata aacttaaaga ccattgcttc atcagcagat
 1080
 cctaaaaatg ttagtatacc atcttctgaa gctttatctt cggatccttc ctacaacaaa
 1140
 gaaaaacaca ttattcatcc tacccaaaag tctaaagcat cacaaggtag tgaccttgaa
 1200
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 1260
 gtcctgacag ttcaagagcc tccaaggatt gaagatgccg aggaatttcc caacctggca
 1320
 gttgcacatctg aaagaagaga cagaatagag acaccgaaat ttcaatctaa gcagcagcca
 1380
 caggataatt ttaaaaataa tgtaaagaag agccagcttc cagtcagtt ggacttgggg
 1440
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<210> 3730
 <211> 422
 <212> PRT
 <213> Homo sapiens

<400> 3730
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 Ile Thr Leu His Pro Tyr Ala Tyr Ser Pro Tyr Thr Leu Asp Ser Thr
 20 25 30
 Gln Asn Val Tyr Ser Val Pro Gly Ser Gln Tyr Leu Tyr Asn Gln Pro

35	40	45
Ser Cys Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr		
50	55	60
Cys Pro Leu Pro Gln Glu Met Lys Ala Leu Phe Lys Lys Lys Thr Tyr		
65	70	75
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala		
85	90	95
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His		
100	105	110
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys		
115	120	125
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser		
130	135	140
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly		
145	150	155
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro		
165	170	175
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys		
180	185	190
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro		
195	200	205
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr		
210	215	220
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu		
225	230	235
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn		
245	250	255
Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro		
260	265	270
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His		
275	280	285
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu		
290	295	300
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Glu Lys Ser		
305	310	315
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu		
325	330	335
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp		
340	345	350
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn		
355	360	365
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu		
370	375	380
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala		
385	390	395
Lys Gln Ser Ser Lys Pro Val Val Val Ser Val Gly Ala Val Pro Val		
405	410	415
Leu Ser Lys Glu Cys Ala		
420		

<210> 3731

<211> 1704

<212> DNA

<213> Homo sapiens

<400> 3731
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120
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180
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240
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360
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420
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480
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540
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600
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660
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720
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1080
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1140
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1200
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1260
gaaagacctg catcctgcat ctgtacttgg ggaagccagc ggagaggacg gggaggttac
1320
ttctctaagt ttctgcagaa atattgaagg ctggagttt gaaatcctaa acttggcctt
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1440
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1500
caccttccag aatgttaaggt tcagcagctc tggttctat tacggtgact tgaatgtcag
1560

attcaagggc ccggcgtcaa aggaaattgg ttttacttt ttgtaatcta ggagcgacag
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 1680
 agaagaaaaa aaaaaaaaaa aaaa
 1704

<210> 3732
 <211> 281
 <212> PRT
 <213> Homo sapiens

<400> 3732
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 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser
 35 40 45
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys
 50 55 60
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile
 65 70 75 80
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu
 85 90 95
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp
 100 105 110
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly
 115 120 125
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln
 130 135 140
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr
 145 150 155 160
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met
 165 170 175
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg
 180 185 190
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val
 195 200 205
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr
 210 215 220
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser
 225 230 235 240
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser
 245 250 255
 Arg Leu Gly Gly Ser Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly
 260 265 270
 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser
 275 280

<210> 3733
 <211> 515
 <212> DNA
 <213> Homo sapiens

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120
tcctcagtgc gggagaggaa gacgccgggg gcangtccat gcctcccgcg gcgtggttgg
180
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240
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360
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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734
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Gly Lys Asp Pro Gly Ser Ala Pro Ser Ser Val Arg Glu Arg Glu Thr
35 40 45
Pro Gly Ala Xaa Pro Cys Leu Pro Arg Arg Gly Trp Cys Val Pro Gly
50 55 60
Asp Val Arg Ser Ser Pro Pro Leu Pro Gly Trp Cys Ala Leu Ser Asp
65 70 75 80
Val Arg Ser Arg Gly Arg Ser Cys Pro Ser Ala Pro Lys Ala Ala Gly
85 90 95
Gly Leu Arg Ala Trp Gly Arg Gly Ser Gly Ala Ala Arg Ala Pro Ala
100 105 110
Pro Ala Pro Ser Pro Ser Ser Gly Xaa Ser Pro Ser Ser Arg Thr Pro
115 120 125
Arg Asp Trp Ser Ala Ser Arg Cys Trp Thr Trp Ser Gly Ala Ala Thr
130 135 140
Ala Pro Thr Pro Phe Ser Pro Ala Gln Gln Pro Pro Ser Ser His Asp
145 150 155 160
Gly Leu Ser Leu Asp Pro Ser Gln Leu Glu Pro
165 170

<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

<400> 3735
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120
tgatcactga acccatccct gacatccgaa accagtatcc agagcacata agcaacatca
180
tctccctccct ccaggaccct gtaagtgtct tccctgccag ctctgtgcag gaaaacttcca
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300
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360
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420
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480
atgagaggcc cttccttcgc cccaatatca tttctggaaa atacgacagc actgctatct
540
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600
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720
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840
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1020
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1080
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1140
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1200
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1320
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1380
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1440
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1500
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1560

ccatgcacct ccgaagggcc tacatgagta tcatgacaca gatgaaggag tcagagcaag
 1620
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 1680
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 2160
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 2280
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 2340
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 2400
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 2460
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 2512

<210> 3736

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

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Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
20															
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
35															
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
50															
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65															
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
85															
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
100															
Val	Gly	Met	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln	

115	120	125
Lys Val Glu Pro Arg Ile Val Ile Val Glu Ala Ala Glu Val Leu		
130	135	140
Glu Ala His Thr Ile Ala Thr Leu Ser Lys Ala		
145	150	155

<210> 3737
<211> 1046
<212> DNA
<213> Homo sapiens

<400> 3737
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120 atccctgctg ccagccagcg catttcctg cacggcaacc gcatactcgca tgtgccagct
180 gccagcttcc gtgcctgccc caacctcacc atccctgtggc tgcactcgaa tgtgctggcc
240 cgaattgatg cggctgcctt cactggcctg gccctcctgg gagcaactgga cctcagcgat
300 aatgcacagc tccggcttgtt ggaccctgcc acattccacg gcctggggccg cctacacacg
360 ctgcacctgg accgctgcgg cctgcaggag ctgggcccgg ggctgttccg cggcctggct
420 cccctgcagt acctctacct gcaggacaac gcgcgtgcagg cactgcctga tgacacacct
480 cgcgacctgg gcaacctcac acacctcttc ctgcacggca accgcatactc cagcgtgccc
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780 ctgcagaagt tccgcggctc ctccctccgag gtgccttgca gcctcccgca acgcctggct
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900 ccttaccatc ccatctggac cggcagggcc accgatgagg agccgcgtgg gcttcccaag
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1046

<210> 3738
<211> 348
<212> PRT
<213> Homo sapiens

<400> 3738

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 20 25 30
 Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
 35 40 45
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
 50 55 60
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
 65 70 75 80
 Arg Ile Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
 85 90 95
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
 100 105 110
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
 115 120 125
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
 130 135 140
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
 145 150 155 160
 Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
 165 170 175
 Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
 180 185 190
 Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
 195 200 205
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
 210 215 220
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
 225 230 235 240
 Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
 245 250 255
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
 260 265 270
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
 275 280 285
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
 290 295 300
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
 305 310 315 320
 Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
 325 330 335
 Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
 340 345

<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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 120
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 180
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 240
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 360
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 420
 tttgtggcag aagaggtgga gtcagggact tactgtttag aaaaatgtga tcactcccc
 480
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 540
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 660
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 720
 attttggggat accatcctta tcttcaaggg ctgttggatc tggcagctct tgatgtcagc
 780
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 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1252

<210> 3740
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3740
 Met Gly Lys Phe Leu His Gln Gly Leu Gly Glu Ser Thr Gly Ser Pro
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 Gly Gln Trp Glu Ser Ala Ala Pro Pro Val Trp Arg Pro Arg Ala His
 20 25 30
 Ser Thr Glu Ala Pro Gly His Pro Gln Glu Asp Gly Lys Gly Gln Leu
 35 40 45
 Ala Gly Glu Ser Pro Gly His Arg Glu Pro Ser Pro Gly Ser Lys Gln

50	55	60													
Asp	Leu	Pro	Ser	Asp	Cys	Leu	Arg	Asn	Ala	Gly	Trp	Thr	Ser	Arg	Asn
65				70				75						80	
Phe	Pro	Phe	Thr	Gly	Gln	Pro	Ala	Ala	Ala	Pro	Pro	Arg	Leu	Gly	Pro
								85		90				95	
Ala	Pro	Gly	Ala	Ala	Asp	Arg	Pro	Ser	Arg	Val	Pro	Lys	Ser	Pro	Ala
								100		105				110	
Leu	Ala	Gln	Lys	Leu	Gly	Gln	Pro	Arg	Asp	Pro	His	Leu	Pro	Leu	Pro
								115		120				125	
Ile	Ser	Pro	Leu	Ser	Gln	Pro	Pro	Pro	Ser	Pro					
								130		135					

<210> 3741

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3741

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 120
 cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctggaatgt gttcctgaaa
 180
 gagctgccccaa ggcttgagaa agcctctttt cagaccaaacc ttctgttca aagctcaaaa
 240
 agaactgcac acaatttagga cagtcataca agatgtgtcc cctaattcctg ccacaatctg
 300
 cgagaaggga ggccgggctt ccgagggcaa agtgccccctg ggaagggttc cgcaggaaac
 360
 agctttgaaa ggaccacacgc ccccaagccac gaggggagca agcacgagcc ggggagagag
 420
 ctctgcgctc gcacacggga ttcatctccg ccgcctctgc ccgtttccag caacacggag
 480
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 540
 ctgggctgct ttcatcacgc gt
 562

<210> 3742

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3742

Met	Gly	Trp	Arg	Asn	Cys	Phe	Arg	Leu	Ala	Pro	Cys	Cys	Trp	Lys	Arg
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Ala	Glu	Ala	Ala	Glu	Met	Asn	Pro	Val	Cys	Glu	Arg	Arg	Ala	Leu	Ser
								20		25				30	
Pro	Ala	Arg	Ala	Cys	Ser	Pro	Arg	Gly	Trp	Gly	Leu	Trp	Ser	Phe	Gln
								35		40				45	
Ser	Cys	Ser	Leu	Arg	Ile	Pro	Ser	Gln	Gly	His	Phe	Ala	Leu	Gly	Ser
								50		55				60	
Pro	Ala	Ser	Leu	Leu	Ala	Asp	Cys	Gly	Arg	Ile	Arg	Gly	Ser	Ile	Leu

65	70	75	80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu			
85	90	95	
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly			
100	105	110	
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser			
115	120	125	
Ala Gly Glu Gly Phe Leu Gly Thr Gin Gly			
130	135		

<210> 3743

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3743

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 120
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 180
 aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
 240
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 300
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 360
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 420
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 468

<210> 3744

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3744

Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met			
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Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala			
20	25	30	
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser			
35	40	45	
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg			
50	55	60	
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser			
65	70	75	80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu			
85	90	95	
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser			
100	105	110	
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln			

115	120	125	
Arg Thr Val Phe Val Phe			
130			
<210> 3745			
<211> 345			
<212> DNA			
<213> Homo sapiens			
<400> 3745			
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60 gacgcgtgtgg gagagaaaaa cagccacatg tgggctggct gcttggagga gacacatgag			
120 ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgct tgggcaccac			
180 gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga			
240 tgcagcatct gctccggacg cctctcgctg tcggtgccag gcctgccagg ccaagccccg			
300 attctcaggg gcggcaggag gtgggaggca cgtttgggcg gatcc			
345			
<210> 3746			
<211> 102			
<212> PRT			
<213> Homo sapiens			
<400> 3746			
Met Ala Gly Trp Cys Val Tyr Gly Thr Leu Trp Glu Arg Lys Thr Ala			
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Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val			
20	25	30	
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr			
35	40	45	
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile			
50	55	60	
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys			
65	70	75	80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly			
85	90	95	
Arg His Val Trp Ala Asp			
100			
<210> 3747			
<211> 800			
<212> DNA			
<213> Homo sapiens			
<400> 3747			
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120			

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 240
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 300
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 360
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 480
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<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

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Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
								20						25	30
Glu	Glu	Ley	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp	
								35						40	45
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
								50						55	60
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Arg	
								65						70	75
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
								85						90	95
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
								100						105	110
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
								115						120	125
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
								130						135	

<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749
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 60
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<210> 3750
<211> 105
<212> PRT
<213> Homo sapiens

<400> 3750
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 35 40 45
 Ser Thr Ser Lys Gln Met Pro Pro Ser Asp Ala Glu Gly Asp Pro Leu
 50 55 60
 Met Asn Met Leu Met Arg Leu Gln Glu Ala Ala Asn Tyr Ser Ser Pro
 65 70 75 80
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 Leu Asp Ser Ser Leu Glu Ser Thr Leu
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<210> 3751
<211> 554
<212> DNA
<213> Homo sapiens

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<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

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Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
							20			25			30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
						35			40			45			
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
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<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

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					20				25				30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
					35			40				45			
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
					50			55			60				
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
					65			70			75			80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

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100	105	110
Val Pro Ser Pro Glu Cys Glu Ser Phe Leu Glu His Leu Gln Arg Ala		
115	120	125
Leu Arg Ser Arg Phe Arg Leu Arg Leu Leu Gly Val Arg Gln Ala Gln		
130	135	140
Pro Leu Cys Glu Glu Leu Cys Gln Ala Trp Phe Ala Asn Cys Glu Asp		
145	150	155
Asp Ile Thr Cys Gly Pro Thr Trp Leu Pro Leu Ser Glu Lys Arg Gly		
165	170	175
Cys Glu Pro Ser Cys Leu Thr Tyr Gly Gln Thr Phe Ala Asp Gly Thr		
180	185	190
Asp Leu Cys Arg Ser Ala Leu Gly His Ala Leu Pro Val Ala Ala Pro		
195	200	205
Gly Ala Arg His Cys Phe Asn Ile Ser Ile Ser Ala Val Pro Arg Pro		
210	215	220
Arg Pro Gly Arg Arg Gly Arg Glu Ala Pro Ser Arg Arg Ser Arg Ser		
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<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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<210> 3756
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 3756

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														30	
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro
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Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
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Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
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Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
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Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
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Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
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Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
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Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu
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															140

145	150	155	160
Gln His Asp Cys Thr Phe Asp His Met Gly Arg Gly Arg Glu Ala			
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180	185	190	
Arg Ile Gly Glu Gly Cys Ser			
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<210> 3757
<211> 1046
<212> DNA
<213> Homo sapiens

<400> 3757
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420 ggc当地
480 ctggcactac tagtgaagtt gggccttttc cagaatgtcg agatgaaatt tgaacccttc
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960 tatggaaaggc agacatctt cttgccaagg ctgccagctg aagcttcaag
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<210> 3758
<211> 199
<212> PRT

<213> Homo sapiens

<400> 3758

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Gly Lys Ser Gly Leu Leu Thr Ser His Thr Thr Asp Ser Leu Gln Leu
 35          40          45
Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
 50          55          60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
 65          70          75          80
Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
 85          90          95
Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
100          105         110
Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
115          120         125
Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
130          135         140
Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
145          150         155         160
Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
165          170         175
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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540

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 830

<210> 3760

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3760

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						20			25				30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
						35			40			45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
						50			55			60			
Gly	Arg	Thr	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met	
						65			70			75			80
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gln	Ala	Leu	
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Phe	Val	Leu	Leu												
						100									

<210> 3761

<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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<210> 3762

<211> 75

<212> PRT

<213> Homo sapiens

<400> 3762

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Arg	Pro	Pro	Pro	Glu	Gly	Leu	Gly	Lys	Gly	Gly	Arg	Pro	Ala	Ala	Ala
				35				40			45				
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<210> 3763

<211> 1340

<212> DNA

<213> Homo sapiens

<400> 3763

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<210> 3764

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764
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 Phe Tyr Met Glu Lys Gly Thr His Arg Gly Leu Tyr Lys Ser Ile Gln
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 Cys Leu Ile Gly Ile Val Pro Thr Ser Val Ile Val Thr Gly Val Gln
 130 135 140
 Val Ser Ser Arg Ile Phe Met Val Trp Leu Ile Thr His Ser Ile Lys
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 Pro Ile Gln Asn Glu Glu Ser Val Val Leu Phe Leu Val Ala Trp Thr
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 Lys Tyr Asn Val Ser Phe Asp Tyr Tyr Phe Leu Leu Ile Thr Met

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<211> 464
<212> PRT
<213> Homo sapiens

<400> 3766
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35 40 45
Lys Val Lys Lys Met Gly Leu Gly His Glu Gln Gly Phe Gly Ala Pro
50 55 60
Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp
65 70 75 80
Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val
85 90 95
Leu Leu Ser Asn Glu Glu Asp Arg Lys Val Gly Lys Leu Phe Glu Asp
100 105 110
Thr Lys Tyr Thr Thr Leu Ile Ala Lys Leu Lys Ser Asp Gly Ile Pro
115 120 125
Met Tyr Lys Arg Asn Val Met Ile Leu Thr Asn Pro Val Ala Ala Lys
130 135 140
Lys Asn Val Ser Ile Asn Thr Val Thr Tyr Glu Trp Ala Pro Pro Val
145 150 155 160
Gln Asn Gln Ala Leu Ala Arg Gln Tyr Met Gln Met Leu Pro Lys Glu
165 170 175
Lys Gln Pro Val Ala Gly Ser Glu Gly Ala Gln Tyr Arg Lys Lys Gln
180 185 190
Leu Ala Lys Gln Leu Pro Ala His Asp Gln Asp Pro Ser Lys Cys His
195 200 205
Glu Leu Ser Pro Arg Glu Val Lys Glu Met Glu Gln Phe Val Lys Lys
210 215 220
Tyr Lys Ser Glu Ala Leu Gly Val Gly Asp Val Lys Leu Pro Cys Glu
225 230 235 240
Met Asp Ala Gln Gly Pro Lys Gln Met Asn Ile Pro Gly Gly Asp Arg
245 250 255
Ser Thr Pro Ala Ala Val Gly Ala Met Glu Asp Lys Ser Ala Glu His
260 265 270
Lys Arg Thr Gln Tyr Ser Cys Tyr Cys Cys Lys Leu Ser Met Lys Glu
275 280 285
Gly Asp Pro Ala Ile Tyr Ala Glu Arg Ala Gly Tyr Asp Lys Leu Trp
290 295 300
His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp
305 310 315 320
Met Ile Tyr Phe Trp Lys Asn Glu Lys Leu Tyr Cys Gly Arg His Tyr
325 330 335
Cys Asp Ser Glu Lys Pro Arg Cys Ala Gly Cys Asp Glu Leu Ile Phe
340 345 350
Ser Asn Glu Tyr Thr Gln Ala Glu Asn Gln Asn Trp His Leu Lys His
355 360 365
Phe Cys Cys Phe Asp Cys Asp Ser Ile Leu Ala Gly Glu Ile Tyr Val
370 375 380
Met Val Asn Asp Lys Pro Val Cys Lys Pro Cys Tyr Val Lys Asn His

385	390	395	400
Ala Val Val Cys Gln Gly Cys His Asn Ala Ile Asp Pro Glu Val Gln			
405	410	415	
Arg Val Thr Tyr Asn Asn Phe Ser Trp His Ala Ser Thr Glu Cys Phe			
420	425	430	
Leu Cys Ser Cys Cys Ser Lys Cys Leu Ile Gly Gln Lys Phe Met Pro			
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<210> 3767

<211> 2439

<212> DNA

<213> Homo sapiens

<400> 3767

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<210> 3768
 <211> 379
 <212> PRT
 <213> Homo sapiens

<400> 3768
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Thr Thr Asp Ser Leu Gln Leu Trp Phe Val Arg	Leu Ala Leu Leu Val	
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Lys Leu Gly Leu Phe Gln Asn Ala Glu Met	Glu Phe Glu Pro Phe Gly	
85	90	95
Asn Leu Asp Gln Pro Asp Leu Tyr Tyr	Glu Tyr Tyr Pro His Val Tyr	
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Pro Gly Arg Arg Gly Ser Met Val Pro Phe Ser Met Arg	Ile Leu His	
115	120	125
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130	135	140
Leu His Lys Val Lys Thr Val Cys Ser Lys Ile	Leu Ala Asn Leu Glu	
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Gln Gly Leu Ala Glu Asp Gly Gly Met Ser Ser Val Thr	Gln Glu Gly	
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Arg Gln Ala Ser Ile Arg Leu Trp Arg Ser Arg	Leu Gly Arg Val Met	
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Val Glu Ala Tyr His Ser Val Ile Lys Tyr Tyr	Pro Glu Gln Glu Pro	
210	215	220
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Lys Thr Ala Glu Lys Tyr Phe Gln Asp Val Glu Lys Val	Thr Gln Lys	
245	250	255
Leu Asp Gly Leu Gln Gly Lys Ile Met Val Leu Met Asn	Ser Ala Phe	
260	265	270
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Glu Ile Leu Arg Met Asp Pro Arg Asn Ala Val Ala	Asn Asn Asn Ala	
290	295	300
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305	310	315
Leu Glu Ala Met Val Gln Gln Asp Pro Arg His	Tyr Leu His Glu Ser	
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Val Leu Phe Asn Leu Thr Thr Met Tyr	Glu Leu Glu Ser Ser Arg Ser	
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<210> 3769

<211> 1931

<212> DNA

<213> Homo sapiens

<400> 3769

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<211> 447
<212> PRT
<213> Homo sapiens

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 Cys Ser Gly His Asn His Val Pro Asn Ser Leu Ser Tyr Ala Arg Asp
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 Glu Leu Thr Gln Ser Phe His Arg Leu Ser Val Cys Val Tyr Gly Asn
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 115 120 125
 Ser Ala Gly Ile Pro Gly Lys Ser Glu Leu Pro Tyr Glu Glu Leu Trp
 130 135 140
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 145 150 155 160
 Glu Lys Asn Arg Cys Asp Gln Phe Arg Gly Ser Val Arg Ser Lys Cys
 165 170 175
 Ala Thr Ser Pro Leu Pro Ile Pro Gly Thr Leu Gly Ala Ala Val Lys
 180 185 190
 Ser Ser Asp Thr Ala Leu Pro Pro Pro Pro Val Pro Pro Lys Ser Glu
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 Arg Ser Ala Lys Pro Leu Ser Thr Ser Pro Ser Ile Pro Pro Arg Thr
 225 230 235 240
 Val Lys Pro Ala Arg Gln Gln Thr Arg Ser Pro Ser Pro Thr Leu Ser
 245 250 255
 Tyr Tyr Ser Ser Gly Leu His Asn Ile Val Thr Lys Thr Asp Thr Asn
 260 265 270
 Pro Ser Glu Ser Thr Pro Val Ser Cys Tyr Pro Cys Asn Arg Val Lys
 275 280 285
 Thr Asp Ser Val Asp Leu Lys Ser Pro Phe Gly Ser Pro Ser Ala Glu

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305	310	315
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325	330	335
Ser Tyr Pro Arg Gln Lys Thr Pro Gly Thr Pro Lys Arg Asn Cys Pro		
340	345	350
Ala Pro Phe Asp Phe Asp Gly Cys Glu Leu Leu Ala Ser Pro Thr Ser		
355	360	365
Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser Gly Cys Pro Lys Ser		
370	375	380
Ala Ser Tyr Ser Leu Glu Ser Thr Asp Val Lys Ser Leu Ala Ala Gly		
385	390	395
Val Thr Lys Gln Ser Thr Ser Cys Pro Ala Leu Pro Pro Arg Ala Pro		400
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<210> 3778
<211> 1049
<212> PRT
<213> Homo sapiens

<400> 3778
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Glu Lys Arg Asn Lys Ile Glu Glu Ala Pro Glu Ala Thr Pro Gln Pro
35 40 45
Ser Gln Pro Gly Pro Ser Ser Pro Ile Ser Leu Ser Ala Glu Glu Glu
50 55 60
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65 70 75 80
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85 90 95
Arg Lys Ala Ser Ile Ser Tyr Phe Lys Asn Gln Arg Gly Ile Gln Tyr
100 105 110
Ile Asp Leu Ser Ser Asp Ser Glu Asp Val Val Ser Pro Asn Cys Ser
115 120 125
Asn Thr Val Gln Glu Lys Thr Phe Asn Lys Asp Thr Val Ile Ile Val
130 135 140
Ser Glu Pro Ser Glu Asp Glu Glu Ser Gln Gly Leu Pro Thr Met Ala
145 150 155 160
Arg Arg Asn Asp Asp Ile Ser Glu Leu Glu Asp Leu Ser Glu Leu Glu
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Asp Leu Lys Asp Ala Lys Leu Gln Thr Leu Lys Glu Leu Phe Pro Gln
180 185 190
Arg Ser Asp Asn Asp Leu Leu Lys Leu Ile Glu Ser Thr Ser Thr Met
195 200 205
Asp Gly Ala Ile Ala Ala Ala Leu Leu Met Phe Gly Asp Ala Gly Gly
210 215 220
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225 230 235 240
Asp Glu Phe Asn Asp Asp Gln Ser Ile Lys Lys Thr Arg Leu Asp His
245 250 255
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260 265 270
Gln Glu Ser Ile Val Leu Lys Leu Gln Lys Glu Phe Pro Asn Phe Asp
275 280 285
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325 330 335
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Phe Ser Met Lys Ala Gln Asn Gly Phe Asn Lys Lys Arg Lys Lys Asn
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Val Phe Asn Pro Lys Arg Val Val Glu Asp Ser Glu Tyr Asp Ser Gly

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385	390	395
Val Met Glu Asp Gly Tyr Lys Gly Lys Ile Leu His Phe Leu Gln Asp		400
405	410	415
Ala Ser Ile Gly Glu Leu Thr Leu Ile Pro Gln Cys Ser Gln Lys Lys		
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435	440	445
Phe Thr Lys Met Ser Lys Thr Asn Gly Leu Ser Glu Asp Leu Ile Trp		
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His Cys Lys Thr Leu Ile Gln Glu Arg Asp Val Val Ile Arg Leu Met		
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Tyr Gln Glu Gly Asn Asn Gly Pro His Leu Ile Val Val Pro Ala Ser		560
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Thr Ile Asp Asn Trp Leu Arg Glu Val Asn Leu Trp Cys Pro Thr Leu		
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr		
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Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile		720
725	730	735
Lys Pro Phe Ile Leu Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu		
740	745	750
Pro Pro Lys Lys Asp Arg Ile Glu Leu Cys Ala Met Ser Glu Arg Gln		
755	760	765
Glu Gln Leu Tyr Leu Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn		
770	775	780
Asn Leu Val Thr Glu Lys Asn Thr Glu Met Cys Asn Val Met Met Gln		
785	790	795
Leu Arg Lys Met Ala Asn His Pro Leu Leu His Arg Gln Tyr Tyr Thr		800

805	810	815
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His Cys Glu Ala Asn Pro Asp Leu Ile Phe Glu Asp Met Glu Val Met		
835	840	845
Thr Asp Phe Glu Leu His Val Leu Cys Lys Gln Tyr Arg His Ile Asn		
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Val Leu Gly Cys Ile Leu Ser Glu Leu Lys Gln Lys Gly Asp Arg Val		
885	890	895
Val Leu Phe Ser Gln Phe Thr Met Met Leu Asp Ile Leu Glu Val Leu		
900	905	910
Leu Lys His His Gln His Arg Tyr Leu Arg Leu Asp Gly Lys Thr Gln		
915	920	925
Ile Ser Glu Arg Ile His Leu Ile Asp Glu Phe Asn Thr Asp Met Asp		
930	935	940
Ile Phe Val Phe Leu Leu Ser Thr Lys Ala Gly Gly Leu Gly Ile Asn		
945	950	955
Leu Thr Ser Ala Asn Val Val Ile Leu His Asp Ile Asp Cys Asn Pro		
965	970	975
Tyr Asn Asp Lys Gln Ala Glu Asp Arg Cys His Arg Val Gly Gln Thr		
980	985	990
Lys Glu Val Leu Val Ile Lys Leu Ile Ser Gln Gly Thr Ile Glu Glu		
995	1000	1005
Ser Met Leu Lys Ile Asn Gln Gln Lys Leu Lys Leu Glu Gln Asp Met		
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<210> 3779

<211> 1853

<212> DNA

<213> Homo sapiens

<400> 3779

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<210> 3780

<211> 530

<212> PRT

<213> Homo sapiens

<400> 3780

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Asn	Gly	Asp	Ile	Asn	Tyr	Asp	Tyr	Val	His	Glu	Leu	Ser	Leu	Glu	Met
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Lys	Arg	Gln	Lys	Ile	Gln	Arg	Glu	Leu	Met	Lys	Leu	Gln	Glu	Asn	
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Met	Glu	Lys	Arg	Glu	Glu	Ile	Ile	Ile	Lys	Lys	Glu	Val	Ser	Pro	Glu
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Val	Val	Arg	Ser	Lys	Leu	Ser	Pro	Ser	Pro	Ser	Leu	Arg	Lys	Ser	Ser
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180	185	190													
Lys	Pro	Arg	Ser	Thr	Ser	Pro	Ala	Gly	Gln	His	His	Ser	Pro	Ile	Ser
195	200	205													
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210	215	220													
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225	230	235	240												
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245	250	255													
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305	310	315	320												
Ser	Ser	Ser	Arg	Asp	His	Arg	Asp	Asp	Arg	Glu	Pro	Arg	Asp	Gly	Arg
325	330	335													
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340	345	350													
Ser	Arg	Asp	Met	Arg	Asp	Ser	Arg	Glu	Met	Arg	Asp	Tyr	Ser	Arg	Asp
355	360	365													
Thr	Lys	Glu	Ser	Arg	Asp	Pro	Arg	Asp	Ser	Arg	Ser	Thr	Arg	Asp	Ala
370	375	380													
His	Asp	Tyr	Arg	Asp	Arg	Glu	Gly	Arg	Asp	Thr	His	Arg	Lys	Glu	Asp
385	390	395	400												
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405	410	415													
Glu	Ser	Ser	Arg	Thr	Glu	Ile	Arg	Asn	Glu	Ser	Arg	Asn	Glu	Ser	Arg
420	425	430													
Ser	Glu	Ile	Arg	Asn	Asp	Arg	Met	Gly	Arg	Ser	Arg	Gly	Arg	Val	Pro

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Ser	Tyr	Pro	Glu	Arg	Asp	Arg	Tyr	Pro	Glu	Arg	Asp	Asn	Arg	Asp	Gln	
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Ala	Arg	Asp	Ser	Ser	Phe	Glu	Arg	Arg	His	Gly	Glu	Arg	Asp	Arg	Arg	
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Asp	Gln	Arg	Glu	Arg	Ser	Lys	Thr	Lys	Leu	Thr	Asn	Ser	Thr	Ser	Gly	
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Lys	Glu															
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<210> 3781

<211> 1364

<212> DNA

<213> Homo sapiens

<400> 3781

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<210> 3782
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 <213> Homo sapiens

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 Asp Leu Gln Asp Ser Ser Glu Leu His Pro Glu Phe Ala Lys Cys His
 35 40 45
 Val Pro Trp Thr Pro Arg Phe Ala Tyr Gly Val Phe Tyr Ala Asp Pro
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 Cys Thr Gly Gly Asp Ser Tyr His Pro His Glu Gln Ser Ser Pro Pro
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<210> 3784
 <211> 804
 <212> PRT
 <213> Homo sapiens

<400> 3784
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 35 40 45
 His Val Ile Ala Ile Glu Asp Ala Phe Val Asn Ser Gln Glu Trp Thr
 50 55 60
 Leu Ser Arg Ser Val Pro Glu Leu Lys Val Gly Ile Val Gly Asn Leu
 65 70 75 80
 Ala Ser Gly Lys Ser Ala Leu Val His Arg Tyr Leu Thr Gly Thr Tyr
 85 90 95
 Val Gln Glu Glu Ser Pro Glu Gly Gly Arg Phe Lys Lys Glu Ile Val
 100 105 110
 Val Asp Gly Gln Ser Tyr Leu Leu Ile Arg Asp Glu Gly Gly Pro
 115 120 125
 Pro Glu Ala Gln Phe Ala Met Trp Val Asp Ala Val Ile Phe Val Phe
 130 135 140
 Ser Leu Glu Asp Glu Ile Ser Phe Gln Thr Val Tyr His Tyr Tyr Ser
 145 150 155 160
 Arg Met Ala Asn Tyr Arg Asn Thr Ser Glu Ile Pro Leu Val Leu Val
 165 170 175
 Gly Thr Gln Asp Ala Ile Ser Ser Ala Asn Pro Arg Val Ile Asp Asp
 180 185 190
 Ala Arg Ala Arg Lys Leu Ser Asn Asp Leu Lys Arg Cys Thr Tyr Tyr
 195 200 205
 Glu Thr Cys Ala Thr Tyr Gly Leu Asn Val Glu Arg Val Phe Gln Asp
 210 215 220
 Val Ala Gln Lys Ile Val Ala Thr Arg Lys Lys Gln Gln Leu Ser Ile
 225 230 235 240
 Gly Pro Cys Lys Ser Leu Pro Asn Ser Pro Ser His Ser Ser Val Cys

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Ser Ala Gln Val Ser Ala Val His Ile Ser Gln Thr Ser Asn Gly Gly			
260	265	270	
Gly Ser Leu Ser Asp Tyr Ser Ser Ser Val Pro Ser Thr Pro Ser Thr			
275	280	285	
Ser Gln Lys Glu Leu Arg Ile Asp Val Pro Pro Thr Ala Asn Thr Pro			
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Thr Pro Val Arg Lys Gln Ser Lys Arg Arg Ser Asn Leu Phe Thr Ser			
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Arg Lys Gly Ser Asp Pro Asp Lys Glu Lys Lys Gly Leu Glu Ser Arg			
325	330	335	
Ala Asp Ser Ile Gly Ser Gly Arg Ala Ile Pro Ile Lys Gln Gly Met			
340	345	350	
Leu Leu Lys Arg Ser Gly Lys Ser Leu Asn Lys Glu Trp Lys Lys Lys			
355	360	365	
Tyr Val Thr Leu Cys Asp Asn Gly Val Leu Thr Tyr His Pro Ser Leu			
370	375	380	
His Asp Tyr Met Gln Asn Val His Gly Lys Glu Ile Asp Leu Leu Arg			
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Thr Thr Val Lys Val Pro Gly Lys Arg Pro Pro Arg Ala Thr Ser Ala			
405	410	415	
Cys Ala Pro Ile Ser Ser Pro Lys Thr Asn Gly Leu Ser Lys Asp Met			
420	425	430	
Ser Ser Leu His Ile Ser Pro Asn Ser Asp Thr Gly Leu Gly Asp Ser			
435	440	445	
Val Cys Ser Ser Pro Ser Ile Ser Ser Thr Thr Ser Pro Lys Leu Asp			
450	455	460	
Pro Pro Pro Ser Pro His Ala Asn Arg Lys Lys His Arg Arg Lys Lys			
465	470	475	480
Ser Thr Ser Asn Phe Lys Ala Asp Gly Leu Ser Gly Thr Ala Glu Glu			
485	490	495	
Gln Glu Glu Asn Phe Glu Phe Ile Ile Val Ser Leu Thr Gly Gln Thr			
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Trp His Phe Glu Ala Thr Thr Tyr Glu Glu Arg Asp Ala Trp Val Gln			
515	520	525	
Ala Ile Glu Ser Gln Ile Leu Ala Ser Leu Gln Ser Cys Glu Ser Ser			
530	535	540	
Lys Asn Lys Ser Arg Leu Thr Ser Gln Ser Glu Ala Met Ala Leu Gln			
545	550	555	560
Ser Ile Arg Asn Met Arg Gly Asn Ser His Cys Val Asp Cys Glu Thr			
565	570	575	
Gln Asn Pro Asn Trp Ala Ser Leu Asn Leu Gly Ala Leu Met Cys Ile			
580	585	590	
Glu Cys Ser Gly Ile His Arg Asn Leu Gly Thr His Leu Ser Arg Val			
595	600	605	
Arg Ser Leu Asp Leu Asp Asp Trp Pro Ile Glu Leu Ile Lys Val Met			
610	615	620	
Ser Ser Ile Gly Asn Glu Leu Ala Asn Ser Val Trp Glu Glu Ser Ser			
625	630	635	640
Gln Gly Arg Thr Lys Pro Ser Val Asp Ser Thr Arg Glu Glu Lys Glu			
645	650	655	
Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys Leu Phe Leu Ala Pro Leu			
660	665	670	
Pro Cys Thr Glu Leu Ser Leu Gly Gln His Leu Leu Arg Ala Thr Ala			

675	680	685
Asp Glu Asp Leu Arg Thr Ala Ile Leu Leu Leu Ala His Gly Ser Arg		
690	695	700
Asp Glu Val Asn Glu Thr Cys Gly Glu Gly Asp Gly Arg Thr Ala Leu		
705	710	715
His Leu Ala Cys Arg Lys Gly Asn Val Val Leu Ala Gln Leu Leu Ile		
725	730	735
Trp Tyr Gly Val Asp Val Thr Ala Arg Asp Ala His Gly Asn Thr Ala		
740	745	750
Leu Ala Tyr Ala Arg Gln Ala Ser Ser Gln Glu Cys Ile Asp Val Leu		
755	760	765
Leu Gln Tyr Gly Cys Pro Asp Glu Arg Phe Val Leu Met Ala Thr Pro		
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Asn Leu Ser Arg Arg Asn Asn Asn Arg Asn Asn Ser Ser Gly Arg Val		
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Pro Thr Ile Ile		800

<210> 3785
<211> 1901
<212> DNA
<213> Homo sapiens

<400> 3785
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300 ggtcaccctc cagccggtc tgtccatgt gcaggtgatg ggggtacga taagcagcaa
360 tgagggccca ggaagacctc agtctcctgg gggccatcc taaaagatgg caagggcagc
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540 cgggagcaag cgaacagaac aggagcaagc agcacacaca ggcagtgtat gtgcaagaag
600 cggagagagg tgagccggct gcagcactgg gcgagaactg cgggtgaggt aagggccaca
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720 ccaacacctcc cactccacag ttggcacagg ttctccctgc ttggcagctt ctatcggtgg
780 cagccctctg gggacttgca gggtaggtg taaaggtggc agtactgggg ctgggctggg
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900

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 1320
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<210> 3786

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3786

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Thr	Glu	Met	Ser	Leu	His	Ala	Leu	Tyr	Met	His	Gln	Leu	His	Lys	Gln
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Gln	Ala	Gln	Ala	Glu	Pro	Glu	Arg	His	Val	Trp	His	Arg	Arg	Glu	Ser
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Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro	Asp	Glu	Gly	Gly	Glu	Gly	Ala	Arg
65															80
Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser	Ala	Ser	Tyr	Pro	Cys	Ala	Ala	Pro
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Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe	Gln	Arg

100	105	110
Arg Tyr Gly Gly Ile Thr Asp Pro Gly Thr Val Pro Arg Val Pro Ser		
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His Phe Ser Arg Leu Pro Leu Gly Gly Trp Ala Glu Asp Gly Gln Ser		
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Ala Ser Arg His Pro Glu Pro Val Pro Glu Glu Gly Ser Glu Asp Glu		
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Leu Pro Pro Gln Val His Lys Val		
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<210> 3787

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3787

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 717

<210> 3788

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3788

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 20 25 30
 Pro Trp Gly Ala Lys Cys Ser Trp Arg Gln Val Ala Lys Gly Glu His
 35 40 45
 Leu Gly Gln Thr Pro Gly Phe Ser Ser Arg Leu Pro His Leu Pro Ala

50	55	60	
Ser Leu Leu Ser Trp Leu Ser Pro Ser Leu Leu Val Cys Asn Lys Gly			
65	70	75	80
Ala Ala Val Ile Thr His Glu Gln Cys Leu Ala Gln Ser Gly Arg Ser			
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Ala Val Leu Val His Met Glu Glu Pro Lys Gln Ala Pro Cys Thr Val			
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Leu			

<210> 3789
<211> 4341
<212> DNA
<213> Homo sapiens

<400> 3789
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<210> 3790
<211> 1092
<212> PRT
<213> Homo sapiens

<400> 3790
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35 40 45
Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser
50 55 60
Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala
65 70 75 80
Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
85 90 95
Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
100 105 110
Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val
115 120 125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
130 135 140
Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu
145 150 155 160
Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
165 170 175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
180 185 190
Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
195 200 205
Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu
210 215 220
Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn
225 230 235 240
Leu Arg Thr Trp Leu Ala Arg Ile Glu Ser Glu Leu Ser Lys Pro Val
245 250 255
Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu
260 265 270
Gln Gln Asp Leu Gln Arg Asp Ile Glu Gln His Ser Ala Gly Val Glu
275 280 285
Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys
290 295 300
Ala Asn Glu Thr Glu Cys Asp Ser Ile Gln Gln Thr Thr Arg Ser Leu
305 310 315 320
Asp Arg Arg Trp Arg Asn Ile Cys Ala Met Ser Met Glu Arg Arg Met
325 330 335
Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr
340 345 350
Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys
355 360 365
Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys

370	375	380
Arg Phe Glu Ala Phe Gln Arg Gln Ile His	Glu Arg Leu Thr Gln Leu	
385 390	395	400
Glu Leu Ile Asn Lys Gln Tyr Arg Arg	Leu Ala Arg Glu Asn Arg Thr	
405	410	415
Asp Thr Ala Ser Arg Leu Lys Gln Met Val His	Glu Gly Asn Gln Arg	
420	425	430
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val	Leu Arg Arg Leu Arg	
435	440	445
His Phe Thr Asn Gln Arg Glu Glu Phe Glu Gly	Thr Arg Glu Ser Ile	
450 455	460	
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465 470	475	480
Phe Ser Glu Ser Asp Ala Asp Asp Lys Met Arg	Gln Leu Asn Gly Phe	
485	490	495
Gln Gln Glu Ile Thr Leu Asn Thr Asn Ile Asp	Gln Leu Ile Val	
500	505	510
Phe Gly Glu Gln Leu Ile Gln Lys Ser Glu Pro	Leu Asp Ala Val Leu	
515	520	525
Ile Glu Asp Glu Leu Glu Leu His Arg Tyr Cys	Gln Glu Val Phe	
530 535	540	
Gly Arg Val Ser Arg Phe His Arg Arg Leu Thr	Ser Cys Thr Pro Gly	
545 550	555	560
Leu Glu Asp Glu Lys Glu Ala Ser Glu Asn Glu	Thr Asp Met Glu Asp	
565	570	575
Pro Arg Glu Ile Gln Thr Asp Ser Trp Arg Lys	Arg Gly Glu Ser Glu	
580	585	590
Glu Pro Ser Ser Pro Gln Ser Leu Cys His Leu	Val Ala Pro Gly His	
595	600	605
Glu Arg Ser Gly Cys Glu Thr Pro Val Ser Val	Asp Ser Ile Pro Leu	
610 615	620	
Glu Trp Asp His Thr Gly Asp Val Gly Gly	Ser Ser Ser His Glu Glu	
625 630	635	640
Asp Glu Glu Gly Pro Tyr Tyr Ser Ala Leu Ser	Gly Lys Ser Ile Ser	
645	650	655
Asp Gly His Ser Trp His Val Pro Asp Ser Pro	Ser Cys Pro Glu His	
660	665	670
His Tyr Lys Gln Met Glu Gly Asp Arg Asn	Val Pro Pro Val Pro Pro	
675	680	685
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly	Lys Leu Leu Leu Pro	
690 695	700	
Pro Gly Thr Asp Gly Gly Lys Glu Gly Pro Arg	Val Leu Asn Gly Asn	
705 710	715	720
Pro Gln Gln Glu Asp Gly Gly Leu Ala Gly	Ile Thr Glu Gln Gln Ser	
725	730	735
Gly Ala Phe Asp Arg Trp Glu Met Ile Gln Ala	Gln Glu Leu His Asn	
740	745	750
Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu	Asn Ser Asp Ile Ser	
755	760	765
Ala Ile Thr Thr Trp Leu Lys Lys Thr Glu Ala	Glu Leu Glu Met Leu	
770 775	780	
Lys Met Ala Lys Pro Pro Ser Asp Ile Gln Glu	Ile Glu Leu Arg Val	
785 790	795	800
Lys Arg Leu Gln Glu Ile Leu Lys Ala Phe Asp	Thr Tyr Lys Ala Leu	

805	810	815
Val Val Ser Val Asn Val Ser Ser Lys Glu Phe Leu Gln Thr Glu Ser		
820	825	830
Pro Glu Ser Thr Glu Leu Gln Ser Arg Leu Arg Gln Leu Ser Leu Leu		
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Trp Glu Ala Ala Gln Gly Ala Val Asp Ser Trp Arg Gly Gly Leu Arg		
850	855	860
Gln Ser Leu Met Gln Cys Gln Asp Phe His Gln Leu Ser Gln Asn Leu		
865	870	880
Leu Leu Trp Leu Ala Ser Ala Lys Asn Arg Arg Gln Lys Ala His Val		
885	890	895
Thr Asp Pro Lys Ala Asp Pro Arg Ala Leu Leu Glu Cys Arg Arg Glu		
900	905	910
Leu Met Gln Leu Glu Lys Glu Leu Val Glu Arg Gln Pro Gln Val Asp		
915	920	925
Met Leu Gln Glu Ile Ser Asn Ser Leu Leu Ile Lys Gly His Gly Glu		
930	935	940
Asp Cys Ile Glu Ala Glu Glu Lys Val His Val Ile Glu Lys Lys Leu		
945	950	960
Lys Gln Leu Arg Glu Gln Val Ser Gln Asp Leu Met Ala Leu Gln Gly		
965	970	975
Thr Gln Asn Pro Ala Ser Pro Leu Pro Ser Phe Asp Glu Val Asp Ser		
980	985	990
Gly Asp Gln Pro Pro Ala Thr Ser Val Pro Ala Pro Arg Ala Lys Gln		
995	1000	1005
Phe Arg Ala Val Arg Thr Thr Glu Gly Glu Glu Thr Glu Ser Arg		
1010	1015	1020
Val Pro Gly Ser Thr Arg Pro Gln Arg Ser Phe Leu Ser Arg Val Val		
1025	1030	1035
Arg Ala Ala Leu Pro Leu Gln Leu Leu Leu Leu Leu Leu Leu Leu		
1045	1050	1055
Ala Cys Leu Leu Pro Ser Ser Glu Glu Asp Tyr Ser Cys Thr Gln Ala		
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Asn Asn Phe Ala Arg Ser Phe Tyr Pro Met Leu Arg Tyr Thr Asn Gly		
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Pro Pro Pro Thr		
1090		

<210> 3791

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 3791

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120
tgaacttct ttaaacattt agcctttcc tcctcctgct tttcccgagc tttccgttcc
180
tcttcctct tccggcaagc aacttcctca ggtgactctg ccctttgatc cattggaata
240
tcctgtccca gagacatagc aattgctctc atcatctggt cctcttcaga catgctgaga
300

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tcccgaaacaa ctccctccat gattggagga ggggtgggta aaaggtaactc tggccctgc
 360
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 420
 atagagctgtt gcagttgttg ctggttgact tgagggtccc ggccgggagcc accttcctct
 480
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 540
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 600
 ccatataacct tcaggggttt ccgggtccat aagttttga tgcaagtaaa ggctgcttc
 660
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 720
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 780
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 840
 aatccctcag aaacaggaac tttacctccc atggacagag cccagttgaa agttcaaaa
 900
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<210> 3792

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3792

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Phe	Leu	Cys	Ser	Gly	Gly	His	Asn	Ala	Leu	Phe	Glu	Thr	Phe	Asn	Trp		
														25	30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His		
														35	40	45	
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met		
														50	55	60	
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His		
														65	70	75	80
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe		
														85	90	95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys		
														100	105	110	
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Arg			
														115	120	125	
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu		
														130	135	140	
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly		
														145	150	155	160
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln			
														165	170	175	
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg		

180	185	190
Glu His Ala Met Glu Ala Leu Leu Asn Thr Ser Thr	Met Glu Gln Ala	
195	200	205
Thr Glu Tyr Leu Leu Thr His Pro Pro Pro Ile Met	Gly Gly Val Val	
210	215	220
Arg Asp Leu Ser Met Ser Glu Glu Asp Gln Met Met Arg Ala Ile Ala		
225	230	235
Met Ser Leu Gly Gln Asp Ile Pro Met Asp Gln Arg Ala Glu Ser Pro		
245	250	255
Glu Glu Val Ala Cys Arg Lys Glu Glu Glu Arg Lys Ala Arg Glu		
260	265	270
Lys Gln Glu Glu Glu Ala Lys Cys Leu Lys Lys Val Gln Gly Cys		
275	280	285

<210> 3793

<211> 360

<212> DNA

<213> Homo sapiens

<400> 3793

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120
tactttgtgc cgggttaggaa caacagtttc tttttttttt ggagacagtg tttcactctt
180
gttggccagg ctggagggca atggcgcgat ctcagctcac tgcaacctcc gccttcggg
240
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tgcaccatgc ccgactaatt ttgtatTTT agtagagaca gggttctcc atgttggta
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<210> 3794

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3794

Val	Tyr	Thr	His	Thr	Glu	Cys	Val	Cys	Val	Cys	Val				
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Cys	Val	Phe	Ile	Phe	Gln	Ile	Thr	Gly	Arg	Phe	Leu	Gly			
												Cys			
							20	25		30		Tyr			
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Ser	Trp	Arg	Gln	Cys	
							35	40		45					
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser
							50	55		60					
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu
							65	70		75			80		
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp
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<210> 3795

<211> 1341

<212> DNA
<213> Homo sapiens

<400> 3795
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120
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180
cctcgacagg gcttccat catcttcac ggcgtaatgg gcaaagatga gcgtgaaggc
240
aacagccat ccttcttcaa ccctgaagag gctgccacag tgacttccta cctgaagctg
300
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480
ggccaagaac gaagcgtcat ctcatctcc accgtgcgaa gcagccagag ctttgtcag
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600
accggggcca aggccctgct catcatcgtg gggAACCCCCC ttctcctggg ccatgaccct
660
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720
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780
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1080
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1140
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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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 Thr Lys Leu Leu Arg Asn Tyr Arg Ser His Pro Thr Ile Leu Asp Ile
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 Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
 35 40 45
 Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
 50 55 60
 Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
 65 70 75 80
 Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
 85 90 95
 Tyr Leu Lys Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
 100 105 110
 Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
 115 120 125
 Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
 130 135 140
 Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
 145 150 155 160
 Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
 165 170 175
 Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
 180 185 190
 Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
 195 200 205
 Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
 210 215 220
 Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
 225 230 235 240
 Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
 245 250 255
 Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
 260 265 270
 Pro Gln Glu Arg Glu Gly Glu Gly Leu Ser Leu Gln Val Glu Pro
 275 280 285
 Glu Trp Arg Asn Glu Leu
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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 180

aagaacctga gcgacatgga gaacgaattc tactatcgct acccaagctt ccaggacgtg
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720
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780
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1800

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 1920
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 1970

<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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Val	Ile	Leu	Phe	Gly	Val	Phe	Val	Arg	Tyr	Asp	Phe	Glu	Ala	Asp	Ala
									20			25			30
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
								35			40			45	
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
								50			55			60	
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
	65							70			75			80	
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
								85			90			95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
								100			105			110	
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
								115			120			125	
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
								130			135			140	
Leu	Leu	Ile	Met	Thr	Phe	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu
	145							150			155			160	
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
								165			170			175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
								180			185			190	
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
								195			200			205	
Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
								210			215			220	
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
	225								230			235			240
His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
								245			250			255	
Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
								260			265			270	
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
								275			280			285	
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
								290			295			300	
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
	305							310			315			320	
Phe	Leu	Glu	Ser	Arg	Leu	His	Ile	Gln	Asp	Thr	Cys	Gly	Ile	Asn	Asn

325	330	335
Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr		
340	345	350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His		
355	360	365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln		
370	375	380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu		
385	390	395
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly		
405	410	415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met		
420	425	430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys		
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Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro		
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Met Ala Ser Ser Val Pro Leu Val Pro		
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<210> 3799

<211> 210

<212> DNA

<213> Homo sapiens

<400> 3799

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<210> 3800

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3800

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<210> 3801

<211> 4070

<212> DNA

<213> Homo sapiens

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<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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					20				25				30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
					35				40				45		
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
					50				55				60		
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
					65				70				75		80
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
					85				90				95		
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
					100				105				110		
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

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130	135	140
Ala Gly Ile Cys Leu Leu Ile Ile Gln Leu Phe Val Ala Gly Leu		
145	150	155
Ile Val Leu Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly		
165	170	175
Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val		
180	185	190
Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu		
195	200	205
Phe Glu Gly Ala Val Ile Ala Phe His Leu Leu Ala Thr Arg Thr		
210	215	220
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro		
225	230	235
Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Ala Val Val Ile		
245	250	255
Tyr Phe Gln Gly Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr		
260	265	270
Arg Gly Gln Tyr Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn		
275	280	285
Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile		
290	295	300
Ser Gln Met Leu Ser Ala Arg Phe Ser Gly Asn Phe Leu Val Asn Leu		
305	310	315
Leu Gly Gln Trp Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr		
325	330	335
Pro Val Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly		
340	345	350
Ser Val Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met		
355	360	365
Leu Gly Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly		
370	375	380
Ser Ser Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val		
385	390	395
Met Arg Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr		
405	410	415
Ile Pro Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser		
420	425	430
Val Leu Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu		
435	440	445
Leu Ala Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu		
450	455	460
Gln Ser Glu Val Gly Ser Met Gly Ala Leu Leu Phe		
465	470	475

<210> 3803

<211> 345

<212> DNA

<213> Homo sapiens

<400> 3803

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<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

Pro	Arg	Gly	Asn	Ser	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Thr	Gly	Ala	Lys
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					20				25				30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
					35				40			45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
					50				55			60			
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70				75			80			
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
					85				90			95			
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
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Ile	Arg	Ile													
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<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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<211> 280
<212> PRT
<213> Homo sapiens

<400> 3806

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				20				25							30
Pro	Leu	Arg	Phe	Trp	Leu	Val	Ile	Asn	Gln	Glu	Gly	Asn	Met	Val	Thr
							35		40						45
Ala	Arg	Gln	Glu	Pro	Arg	Leu	Val	Leu	Ile	Ser	Leu	Thr	Cys	Asp	Gly
							50		55						60
Asp	Thr	Leu	Thr	Leu	Ser	Ala	Ala	Tyr	Thr	Lys	Asp	Leu	Leu	Pro	
							65		70						80
Ile	Lys	Thr	Pro	Thr	Thr	Asn	Ala	Val	His	Lys	Cys	Arg	Val	His	Gly
							85		90						95
Leu	Glu	Ile	Glu	Gly	Arg	Asp	Cys	Gly	Glu	Ala	Ala	Gln	Trp	Ile	
							100		105						110
Thr	Ser	Phe	Leu	Lys	Ser	Gln	Pro	Tyr	Arg	Leu	Val	His	Phe	Glu	Pro
							115		120						125
His	Met	Arg	Pro	Arg	Arg	Pro	His	Gln	Ile	Ala	Asp	Leu	Phe	Arg	Pro
							130		135						140
Lys	Asp	Gln	Ile	Ala	Tyr	Ser	Asp	Thr	Ser	Pro	Phe	Leu	Ile	Leu	Ser
							145		150						160
Glu	Ala	Ser	Leu	Ala	Asp	Leu	Asn	Ser	Arg	Leu	Glu	Lys	Lys	Val	Lys
							165		170						175
Ala	Thr	Asn	Phe	Arg	Pro	Asn	Ile	Val	Ile	Ser	Gly	Cys	Asp	Val	Tyr
							180		185						190
Ala	Glu	Asp	Ser	Trp	Asp	Glu	Leu	Leu	Ile	Gly	Asp	Val	Glu	Leu	Lys
							195		200						205
Arg	Val	Met	Ala	Cys	Ser	Arg	Cys	Ile	Leu	Thr	Thr	Val	Asp	Pro	Asp
							210		215						220
Thr	Gly	Val	Met	Ser	Arg	Lys	Glu	Pro	Leu	Glu	Thr	Leu	Lys	Ser	Tyr
							225		230						240
Arg	Gln	Cys	Asp	Pro	Ser	Glu	Arg	Lys	Leu	Tyr	Gly	Lys	Ser	Pro	Leu
							245		250						255
Phe	Gly	Gln	Tyr	Phe	Val	Leu	Glu	Asn	Pro	Gly	Thr	Ile	Lys	Val	Gly
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Asp	Pro	Val	Tyr	Leu	Leu	Gly	Gln								
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<210> 3807
<211> 372
<212> DNA
<213> Homo sapiens

<400> 3807

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120					
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372

<210> 3808
<211> 85
<212> PRT
<213> Homo sapiens

<400> 3808
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35 40 45
Ser Tyr His Pro Ala Pro Ser Gly Arg Gly Ser Ala Pro Ser Pro Arg
50 55 60
Ser Ala Pro Gly Trp Leu Arg Pro Phe Trp Ala Phe Ser Phe Trp Pro
65 70 75 80
Gly Gln Phe Ala Ala
85

<210> 3809
<211> 1221
<212> DNA
<213> Homo sapiens

<400> 3809
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<210> 3810
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 3810
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 Ser Trp Arg Ala Ser Ser Asn Cys Ser Arg Ala Glu Pro Ile Lys Glu
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 Phe Ser Arg Lys Val Gly Arg Pro Pro Thr Pro Ser Arg Arg Val Tyr
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 Arg Gly Thr Arg Thr Arg Pro Ser Thr Ser Ser Pro Trp Ser Leu Ala
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 <211> 296
 <212> DNA
 <213> Homo sapiens

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 120

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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
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Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
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Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
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Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		60
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<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
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Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
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Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Gly	
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His	Ser	Leu	Gly	Gly	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro	
									100			105		110	
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
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Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
145									150			155		160	
Val	Ala	Gly	Pro	Trp	Gly	Pro	Gly	Leu	Val	Gln	Arg	Phe	Arg	Pro	Asp

165	170	175
Phe Lys Arg Lys Phe Ala Asp Phe	Phe Glu Asp Asp Thr Ile Ser Glu	
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Tyr Ile Tyr His Cys Asn Ala Gln Asn Pro Ser Gly Glu Thr Ala Phe		
195	200	205
Lys Ala Met Met Glu Ser Phe Gly Trp Ala Arg Arg Pro Met Leu Glu		
210	215	220
Arg Ile His Leu Ile Arg Lys Asp Val Pro Ile Thr Met Ile Tyr Gly		
225	230	235
Ser Asp Thr Trp Ile Asp Thr Ser Thr Gly Lys Lys Val Lys Met Gln		240
245	250	255
Arg Pro Asp Ser Tyr Val Arg Asp Met Glu Ile Lys Gly Ala Ser His		
260	265	270
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<210> 3815

<211> 3669

<212> DNA

<213> Homo sapiens

<400> 3815

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<210> 3816
 <211> 707
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Val Gly Ile Ile Ala Trp Thr His Gly Asp Pro Arg Lys Val Ile

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85	90	95
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100	105	110
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115	120	125
Ser Arg Asp Phe Glu Tyr Tyr Lys Gln Phe Cys Val Pro Gly Phe Lys		
130	135	140
Asn Asn Lys Gly Val Ala Glu Val Leu Arg Asp Gly Asp Cys Pro Ala		
145	150	155
Val Leu Ile Pro Ser Lys Pro Leu Ala Arg Arg Cys Phe Pro Ala Ile		160
165	170	175
His Ala Tyr Lys Gly Val Leu Met Val Gly Asn Glu Thr Thr Tyr Glu		
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Asp Gly His Gly Ser Arg Lys Asn Ile Thr Asp Leu Val Glu Gly Ala		
195	200	205
Lys Lys Ala Asn Gly Val Leu Glu Ala Arg Gln Leu Ala Met Arg Ile		
210	215	220
Phe Glu Asp Tyr Thr Val Ser Trp Tyr Trp Ile Ile Ile Gly Leu Val		
225	230	235
Ile Ala Met Ala Met Ser Leu Leu Phe Ile Ile Leu Leu Arg Phe Leu		240
245	250	255
Ala Gly Ile Met Val Trp Val Met Ile Ile Met Val Ile Leu Val Leu		
260	265	270
Gly Tyr Gly Ile Phe His Cys Tyr Met Glu Tyr Ser Arg Leu Arg Gly		
275	280	285
Glu Ala Gly Ser Asp Val Ser Leu Val Asp Leu Gly Phe Gln Thr Asp		
290	295	300
Phe Arg Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala Phe Met Ile		
305	310	315
Ile Leu Ser Ile Leu Glu Val Ile Ile Ile Leu Leu Ile Phe Leu		320
325	330	335
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355	360	365
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Leu Ser Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp Asp Ser Pro		
385	390	395
Cys Pro Xaa Tyr Cys Glu Asn Leu Xaa Asn Pro Glu Thr Phe Pro Ser		400
405	410	415
Ser Asn Glu Ser Arg Gln Cys Pro Asn Ala Arg Cys Gln Phe Ala Phe		
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Tyr Gly Gly Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu Gln Ile		
435	440	445
Phe Asn Ala Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu Ala Leu		
450	455	460
Gly Gln Val Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp Ala Leu		
465	470	475
Arg Lys Pro Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala Phe Gly		480

485	490	495
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515	520	525
Arg Leu Lys Ala Ala Glu Asn Lys Phe	Ala Lys Cys Leu Met Thr Cys	
530	535	540
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545	550	555
Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr	Gly Thr Asn Phe Cys Thr	
565	570	575
Ser Ala Arg Asn Ala Phe Phe Leu Leu Met	Arg Asn Ile Ile Arg Val	
580	585	590
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595	600	605
Leu Ile Val Gly Ser Val Gly Ile Leu Ala	Phe Phe Phe Thr His	
610	615	620
Arg Ile Arg Ile Val Gln Asp Thr Ala Pro	Pro Leu Asn Tyr Tyr Trp	
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Val Pro Ile Leu Thr Val Ile Val Gly Ser	Tyr Leu Ile Ala His Gly	
645	650	655
Phe Phe Ser Val Tyr Gly Met Cys Val Asp	Thr Leu Phe Leu Cys Phe	
660	665	670
Leu Glu Asp Leu Glu Arg Asn Asp Gly Ser	Ala Glu Arg Pro Tyr Phe	
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<211> 419

<212> DNA

<213> Homo sapiens

<400> 3817

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<213> Homo sapiens

<400> 3818

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50							55								60
Thr	Cys	Arg	Glu	Ala	Met	Glu	Ala	Arg	Leu	Leu	Gln	Asp	Leu	Leu	
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Asp	Val	His	Ala	Gly	Arg	Leu	Gly	Cys	Ser	Leu	Thr	Glu	Ile	His	Thr
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<210> 3819

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<212> DNA

<213> Homo sapiens

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<211> 342

<212> PRT

<213> Homo sapiens

<400> 3824

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<211> 2051

<212> DNA

<213> Homo sapiens

<400> 3825

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<211> 125

<212> PRT

<213> Homo sapiens

<400> 3826

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Thr Asp Ser Ser Arg Gly Asn Cys Arg Gly Ser Arg Pro Ala Ser Ser

35 40 45

Ile Ser Ser Phe Asp Thr Gly Asp Ile Leu Tyr Ser Pro Phe Ser Arg

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						85			90			95			
Ser	Gly	Ser	Lys	Thr	Lys	Phe	Cys	Val	Asn	Glu	Leu	Gln	Asn	Ser	Arg
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<211> 1245

<212> DNA

<213> Homo sapiens

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 Leu Met Thr Val Asp Ser Ala Val Gln Gln Ala Ala Leu Ala Cys Tyr
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 325 330 335
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<210> 3830
 <211> 444
 <212> PRT
 <213> Homo sapiens

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 Val Glu Ser Val Tyr Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His

35	40	45
Val Ser Thr Lys Leu Pro Phe Thr Asp Gly Asp Ala Gln Gln Leu Gln		
50	55	60
Arg Lys Arg His Ile Gly Asn Asp Ile Val Ala Ile Ile Phe Gln Glu		
65	70	75
Glu Asn Thr Pro Phe Val Pro Asp Met Ile Ala Ser Asn Phe Leu His		
85	90	95
Ala Tyr Ile Val Val Gln Val Glu Thr Pro Gly Thr Glu Thr Pro Ser		
100	105	110
Tyr Lys Val Ser Val Thr Ala Arg Glu Asp Val Pro Thr Phe Gly Pro		
115	120	125
Pro Leu Pro Ser Pro Pro Val Phe Gln Lys Gly Pro Glu Phe Arg Glu		
130	135	140
Phe Leu Leu Thr Lys Leu Thr Asn Ala Glu Asn Ala Cys Cys Lys Ser		
145	150	155
Asp Lys Phe Ala Lys Leu Glu Asp Arg Thr Arg Ala Ala Leu Leu Asp		
165	170	175
Asn Leu His Asp Glu Leu His Ala His Thr Gln Ala Met Leu Gly Leu		
180	185	190
Gly Pro Glu Glu Asp Lys Phe Glu Asn Gly Gly His Gly Gly Phe Leu		
195	200	205
Glu Ser Phe Lys Arg Ala Ile Arg Val Arg Ser His Ser Met Glu Thr		
210	215	220
Met Val Gly Gly Gln Lys Lys Ser His Ser Gly Gly Ile Pro Gly Ser		
225	230	235
Leu Ser Gly Gly Ile Ser His Asn Ser Met Glu Val Thr Lys Thr Thr		
245	250	255
Phe Ser Pro Pro Val Val Ala Ala Thr Val Lys Asn Gln Ser Arg Ser		
260	265	270
Pro Ile Lys Arg Arg Ser Gly Leu Phe Pro Arg Leu His Thr Gly Ser		
275	280	285
Glu Gly Gln Gly Asp Ser Arg Ala Arg Cys Asp Ser Thr Ser Ser Thr		
290	295	300
Pro Lys Thr Pro Asp Gly Gly His Ser Ser Gln Glu Ile Lys Ser Glu		
305	310	315
Thr Ser Ser Asn Pro Ser Ser Pro Glu Ile Cys Pro Asn Lys Glu Lys		
325	330	335
Pro Phe Met Lys Leu Lys Glu Asn Gly Arg Ala Ile Ser Arg Ser Ser		
340	345	350
Ser Ser Thr Ser Ser Val Ser Ser Thr Ala Gly Glu Gly Glu Ala Met		
355	360	365
Glu Glu Gly Asp Ser Gly Gly Ser Gln Pro Ser Thr Thr Ser Pro Phe		
370	375	380
Lys Gln Glu Val Phe Val Tyr Ser Pro Ser Pro Ser Ser Glu Ser Pro		
385	390	395
Ser Leu Gly Ala Ala Ala Thr Pro Ile Ile Met Ser Arg Ser Pro Thr		
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Asp Ala Lys Ser Arg Asn Ser Pro Arg Ser Asn Leu Lys Phe Arg Phe		
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Asp Lys Leu Ser His Ala Ser Ser Gly Ala Gly His		
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<210> 3831
<211> 726

<212> DNA

<213> Homo sapiens

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180
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300
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360
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420
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480
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600
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<210> 3832

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3832
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20 25 30
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35 40 45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
50 55 60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
65 70 75 80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
85 90 95
Ile Ser Phe Leu Leu Thr Val Gln Thr Phe
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<210> 3833

<211> 1764

<212> DNA

<213> Homo sapiens

<400> 3833

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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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	20							25					30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
	35							40					45		
Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro	
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Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
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Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val
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Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala
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Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro
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Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu
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Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
	180						185						190		
Leu	Thr	Asp	Ala	Cys	Ala	Leu	Ala	Ser	Asp	Lys	Ser	Arg	Asp	Arg	Phe
	195						200						205		
Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala
	210						215						220		
Ser	Ala	Leu	Leu	Ala	Cys	Val	Arg	Glu	Val	Lys	Val	Ala	Pro	Ser	Glu
	225						230			235			240		
Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala
	245						250						255		
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg
	260						265						270		
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
	275						280						285		
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

290	295	300
Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp		
305	310	315
His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys		320
325	330	335
Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu		
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Pro Pro Val Asn Ser Asn Ser Val Asn		
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<210> 3835
<211> 2366
<212> DNA
<213> Homo sapiens

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180
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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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		20												30	
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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Phe Phe Leu Phe Val Ser Leu Ile Gln Phe Leu Ile Ile Leu Gly Leu		
65	70	75
Val Leu Phe Met Val Tyr Gly Asn Val His Val Ser Thr Glu Ser Asn		
85	90	95
Leu Gln Ala Thr Glu Arg Arg Ala Glu Gly Leu Tyr Ser Gln Leu Leu		
100	105	110
Gly Leu Thr Ala Ser Gln Ser Asn Leu Thr Lys Glu Leu Asn Phe Thr		
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Thr Arg Ala Lys Asp Ala Ile Met Gln Met Trp Leu Asn Ala Arg Arg		
130	135	140
Asp Leu Asp Arg Ile Asn Ala Ser Phe Arg Gln Cys Gln Gly Asp Arg		
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Val Ile Tyr Thr Asn Asn Gln Arg Tyr Met Ala Ala Ile Ile Leu Ser		
165	170	175
Glu Lys Gln Cys Arg Asp Gln Phe Lys Asp Met Asn Lys Ser Cys Asp		
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Ala Leu Leu Phe Met Leu Asn Gln Lys Val Lys Thr Leu Glu Val Glu		
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Ile Ala Lys Glu Lys Thr Ile Cys Thr Lys Asp Lys Glu Ser Val Leu		
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Leu Asn Lys Arg Val Ala Glu Glu Gln Leu Val Glu Cys Val Lys Thr		
225	230	235
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Arg Glu Leu Gln His Gln Glu Arg Gln Leu Ala Lys Glu Gln Leu Gln		
245	250	255
Lys Val Gln Ala Leu Cys Leu Pro Leu Asp Lys Asp Lys Phe Glu Met		
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Asp Leu Arg Asn Leu Trp Arg Asp Ser Ile Ile Pro Arg Ser Leu Asp		
275	280	285
Asn Leu Gly Tyr Asn Leu Tyr His Pro Leu Gly Ser Glu Leu Ala Ser		
290	295	300
Ile Arg Arg Ala Cys Asp His Met Pro Ser Leu Met Ser Ser Lys Val		
305	310	315
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Leu Glu Glu Lys Ala Val Leu Arg Lys Glu Arg Asp Asn Leu Ala Lys		
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Glu Leu Glu Glu Lys Lys Arg Glu Ala Glu Gln Leu Arg Met Glu Leu		
405	410	415
Ala Ile Arg Asn Ser Ala Leu Asp Thr Cys Ile Lys Thr Lys Ser Gln		
420	425	430
Pro Met Met Pro Val Ser Arg Pro Met Gly Pro Val Pro Asn Pro Gln		
435	440	445
Pro Ile Asp Pro Ala Ser Leu Glu Glu Phe Lys Arg Lys Ile Leu Glu		
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465

470

475

<210> 3837

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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 tgtcctctcc tctcaggcag gccattgcac ccatatggct gggcaggcac aggcaagttag
 1800
 gccgaggcca atagcgagtg atgagcggga tcctaggact gatctgttagc ccatgctgat
 1860
 gtcacccacc agggcaatcc atctggaggc ctgagcaccc tggcccagga ctggcttcat
 1920
 cctggcactg accagggaaag actgcctctg accctcttag cagacagagc ccaggcatgg
 1980
 gagcactctg gggcagcctg gctcagggtt attgatttc gtctgtttac cctatccatt
 2040
 aatcaataaca tgtaattaac tccttcaaaa aaaaaaaaaa aaaa
 2084

<210> 3838
 <211> 468
 <212> PRT
 <213> Homo sapiens

<400> 3838
 Leu His Pro Thr Asp Trp Asp Gly Lys Val Ser Glu Ile Lys Lys Lys
 1 5 10 15
 Ile Lys Ser Ile Leu Pro Gly Arg Ser Cys Asp Leu Leu Gln Asp Thr
 20 25 30
 Ser His Leu Pro Pro Glu His Ser Asp Val Val Ile Val Gly Gly
 35 40 45
 Val Leu Gly Leu Ser Val Ala Tyr Trp Leu Lys Lys Leu Glu Ser Arg
 50 55 60
 Arg Gly Ala Ile Arg Val Leu Val Val Glu Arg Asp His Thr Tyr Ser
 65 70 75 80
 Gln Ala Ser Thr Gly Leu Ser Val Gly Gly Ile Cys Gln Gln Phe Ser
 85 90 95
 Leu Pro Glu Asn Ile Gln Leu Ser Leu Phe Ser Ala Ser Phe Leu Arg
 100 105 110
 Asn Ile Asn Glu Tyr Leu Ala Val Val Asp Ala Pro Pro Leu Asp Leu
 115 120 125
 Arg Phe Asn Pro Ser Gly Tyr Leu Leu Ala Ser Glu Lys Asp Ala
 130 135 140
 Ala Ala Met Glu Ser Asn Val Lys Val Gln Arg Gln Glu Gly Ala Lys
 145 150 155 160
 Val Ser Leu Met Ser Pro Asp Gln Leu Arg Asn Lys Phe Pro Trp Ile
 165 170 175
 Asn Thr Glu Gly Val Ala Leu Ala Ser Tyr Gly Met Glu Asp Glu Gly

180	185	190
Trp Phe Asp Pro Trp Cys Leu Leu Gln Gly Leu Arg Arg Lys Val Gln		
195	200	205
Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser		
210	215	220
Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys		
225	230	235
Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln		240
245	250	255
Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala		
260	265	270
Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu		
275	280	285
Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val		
290	295	300
Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp		
305	310	315
Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu		
325	330	335
Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu		
340	345	350
Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala		
355	360	365
Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln		
370	375	380
Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln		
385	390	395
Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala		
405	410	415
Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg		
420	425	430
Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu		
435	440	445
Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu		
450	455	460
Asn Asn Ile Ile		
465		

<210> 3839

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3839

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60

gagggaggagg aggaggagaa agaccagcct gccgagatgg agtacacctaa ctctcgctgt

120

gtcctttca cttatttcca gggagacatt gggtcagtag tggatgaaca cttctcaaga

180

gcttgggcc aagccatcac cctccatcca gaatctgccaa tttcaaaaag caagatgggg

240

ctaaccccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact

300

tcctttgga ccagctcta ccagcccca octgcaccc ttgggggggg agttcatcct
 360
 gacttcagg tcactggacc ccctggcacc tttctgcag ctgatcccag tccttggccg
 420
 ggacacaacc tgcatcagac tggccagcc octccccctg ctgtgtctga gtcctggcc
 480
 tattccttga catctcaggt gagcccatcc tacagccata tgcatgacgt gtacatgcgg
 540
 caccaccacc ctcatgccca catgcaccac cgccaccgccc accatcatca ccatcaccac
 600
 cctcctgctg gctctgcctt ggatccatcc tatgggcctc tgctgatgcc ttcagtgcatt
 660
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 720
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 758

<210> 3840
 <211> 252
 <212> PRT
 <213> Homo sapiens

<400> 3840
 Xaa Arg Val Gln Asp Ser Leu Glu Val Thr Leu Pro Ser Lys Gln Glu
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 Glu Glu Asp Glu Glu Glu Glu Glu Lys Asp Gln Pro Ala Glu
 20 25 30
 Met Glu Tyr Leu Asn Ser Arg Cys Val Leu Phe Thr Tyr Phe Gln Gly
 35 40 45
 Asp Ile Gly Ser Val Val Asp Glu His Phe Ser Arg Ala Leu Gly Gln
 50 55 60
 Ala Ile Thr Leu His Pro Glu Ser Ala Ile Ser Lys Ser Lys Met Gly
 65 70 75 80
 Leu Thr Pro Leu Trp Arg Asp Ser Ser Ala Leu Ser Ser Gln Arg Asn
 85 90 95
 Ser Phe Pro Thr Ser Phe Trp Thr Ser Ser Tyr Gln Pro Pro Pro Ala
 100 105 110
 Pro Cys Leu Gly Gly Val His Pro Asp Phe Gln Val Thr Gly Pro Pro
 115 120 125
 Gly Thr Phe Ser Ala Ala Asp Pro Ser Pro Trp Pro Gly His Asn Leu
 130 135 140
 His Gln Thr Gly Pro Ala Pro Pro Ala Val Ser Glu Ser Trp Pro
 145 150 155 160
 Tyr Pro Leu Thr Ser Gln Val Ser Pro Ser Tyr Ser His Met His Asp
 165 170 175
 Val Tyr Met Arg His His His Pro His Ala His Met His His Arg His
 180 185 190
 Arg His His His His His His Pro Pro Ala Gly Ser Ala Leu Asp
 195 200 205
 Pro Ser Tyr Gly Pro Leu Leu Met Pro Ser Val His Ala Ala Arg Ile
 210 215 220
 Pro Ala Pro Gln Cys Asp Ile Thr Lys Thr Glu Pro Thr Thr Val Thr
 225 230 235 240
 Ser Ala Thr Ser Ala Trp Ala Gly Ala Phe His Gly

245

250

<210> 3841
<211> 367
<212> DNA
<213> Homo sapiens

<400> 3841
ctgggaactc cccacacttc cgtgggcaac atcttgggt cattgatcg tggctactgg
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gtgtccacat gctggggct gtcttcgtc gtgcctggag ccatacgatggc agccatgggg
120
atagtgtgt ttctcttcct cattgaacat ccgaacgacg tcaggtgtc ctccaccctg
180
gtgacgcact caaaaggcta tgagaatggt acaaacaggt tgaggctccc gaagccaatc
240
ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgcctgct gctctcagat
300
ggaaagggtc ccattccaccc gaaccacgtc gtcattctcc ccggggacgg tgggagtggc
360
ccggccg
367

<210> 3842
<211> 122
<212> PRT
<213> Homo sapiens

<400> 3842
Leu Gly Thr Pro His Thr Ser Val Gly Asn Ile Leu Gly Ser Leu Ile
1 5 10 15
Ala Gly Tyr Trp Val Ser Thr Cys Trp Gly Leu Ser Phe Val Val Pro
20 25 30
Gly Ala Ile Val Ala Ala Met Gly Ile Val Cys Phe Leu Phe Leu Ile
35 40 45
Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser
50 55 60
Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile
65 70 75 80
Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu
85 90 95
Leu Leu Ser Asp Gly Lys Gly Ser Ile His Pro Asn His Val Val Ile
100 105 110
Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala
115 120

<210> 3843
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3843
ngctgtccgg cccgcaggc ggtcgaggtg ggaacggagc agccccgggg gcccccttga
60

ggcggcgagg ccgcgaaggg cgccccgtg gagggccgcg gcgcctatggc tcacgtcgcc
120
tcccgcaagc gctcgaggag tcgcagccgg tcccggggac gggggtcgga aaagagaaaag
180
aagaagagca ggaaagacac ctcgaggaac tgctcgccct ccacatccca aggtcgcaag
240
gccagcacgg cccctggggc ggaggcctca cttctccct gcatcacaga gagaagcaag
300
cagaaggccc ggaggagaac aagatccagc tcctccctct cttttccag ttcttcttagc
360
tcctttttt ctcctcgtc ctccctctct tcctccagtg atggccggaa gaagcgaaaa
420
aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc
480
aaggagaagg cgaaagcaca gcaggcagag catcatccgc aaggtggtgg accctgagac
540
ggggcgcacc aggcttatta agggagatgg cgaggtccta gaggaaatcg taaccaaaga
600
acgacacaga gagatcaaca agcaagccac cggggggac tgcctggccct tccagatgc
660
agctgggttg ctccctgagg gccccgtgg caaggctgtg gacgacgctg gc
712

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<210> 3844  
<211> 143  
<212> PRT  
<213> Homo sapiens
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<400> 3844
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Arg Gly Arg Gly Ser Glu Lys Arg Lys Lys Lys Ser Arg Lys Asp Thr
      20          25          30
Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Gly Arg Lys Ala Ser Thr
      35          40          45
Ala Pro Gly Ala Glu Ala Ser Pro Ser Pro Cys Ile Thr Glu Arg Ser
      50          55          60
Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser Ser Ser Ser Ser Ser
      65          70          75          80
Ser Ser
      85          90          95
Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr Lys Asp Lys Arg Arg
      100         105         110
Lys Lys Lys Lys Lys Arg Lys Lys Leu Lys Lys Lys Gly Lys Glu Lys
      115         120         125
Ala Glu Ala Gln Gln Ala Glu His His Pro Gln Gly Gly Gly Pro
      130         135         140

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<210> 3845  
<211> 2302  
<212> DNA  
<213> Homo sapiens
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<400> 3845

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120
gtcacccagt gagtacctga tgatgctgat gccacccagc caggaggagg agaaagacaa
180
gcctgtggcc cccagcaacg tcctgtcgat ggcccagctg cgacacgctgc ccctggccga
240
tcagatcaag atcctgatga agaatgtgaa ggtcatgcct tttgccaact tgatgagcct
300
cctggggcccc tccatcgatt ccgtggctgt tctgccccgc atccagaagg tggcgatgtt
360
ggtccaaggg aactgggtgg tgaagagtga catcctatac cccaaggact cgtccagccc
420
tcacagcggc gtgcctgctg aggtgctctg caggggccga gacttcgtta tgtggaaagtt
480
cacgcagagc cgctgggtgg ttaggaaaga ggtggcaacc gtgaccaaacc tctgcgcccga
540
ggatgtgaag gacttcctgg agcacatggc cgtggtgagg atcaacaaag gctggagtt
600
cattctgcct tatgatgggg agttcatcaa gaagcacccg gatgtggtcc agcggcagca
660
catgctgtgg acgggtatcc aggccaaact ggaaaaagtc tataatcttgc taaaggaaac
720
catgccaaag aagccggatg cacaatcagg gcctgcccgg ctggctgtg gggaccagcg
780
gatccaagta gccaaaacca aggcccagca gaaccacgctg ttgctggagc gggagctgca
840
gcggcggaaag gagcagctgc ggggcctgc ggtccccccc ggtgtgcggta tcaaggagga
900
gcccggtgagc gaggagggcg aggaggacga ggagcaggag gctggaggagg agcccatgg
960
cacttcccccc agcggcctcc acagcaagct ggccaaacggg ctgcctctcg ggccggctgc
1020
ggcacagac agcttcaacg ggcacccgccc ccagggctgc gccagcaccc ctgtggctcg
1080
ggaactgaag gccttcgtgg aggcacccctt tcagagacag tttgtgtca cgctgagcga
1140
actcaagcgc ctcttcaatc tgcacttggc cagcctggcc cccggccaca cactcttcag
1200
cgccatctcg gaccgcattgc tacaggacac ggtgctggcc gccgggttgcgca agcagataact
1260
ggtgcccttt cccccccaga ctgctgcttc cccggatgag cagaagggtt ttcctctcg
1320
ggagtctggta gacatgagtg atcagcatcg acagggtttt cttgaaattt tttccaaaaaa
1380
ttaccgggtta cgccgaaaca tgatccagtc tcgggttact caagagtgtg gagaagatct
1440
cagtaaacag gaggtggata aagtactaaa ggactgctgt gtaagctatg gtggcatgtg
1500
gtaccttaaa gggacagttac agtcttgaca atagtagcaa actactaacc cagcaaact
1560
aagcccaagg aagaaggcg gaaccagaag tagggcctcg acttgcttca gacgacacag
1620

agcaagagga actgaccatc tcacgtaccc tggcattgca cgggcgcgtg gacagaagg
 1680
 attatcctca gccagtcgca gggtcagttt aagtttagtta gatcactccc agaagagacc
 1740
 agctgggacc ttctttcgag tacaatttga aattcctgtat gtattttgtt tattatgg
 1800
 tttcattctc ataataaaaga gagtgtatac ttacatgggc aggatgataa aaatcatggt
 1860
 ttaatatttt cttttgtaaa cttaatgcca acaaggtcta agttatgttt acaacatgaa
 1920
 gaaaacctca aagttctaa tttttaaat gcctagaaga caatatttag tcttgattta
 1980
 tctatctgct aagacctcca ccaatttcat taaaccaa at tgaatttattc tattcttgg
 2040
 attctgtggc cacttcaccc ttgacaacaa cctactttat gtagcagtct caactgttta
 2100
 catgaaccat agcaaaaaaa tcagaatcaa atccatctcc ttttaatgtt tgcaaaaaa
 2160
 tgcaaacaaa accaggttaag tatggaacaa tgtgttaagtg aggttatcac actttgatgt
 2220
 aaaaatttct attttgttta tttttaaat aaatgcaaactaaactaa aaaaaaaaaaaa
 2280
 aaaaaaaaaa aaaaaaaaaa aa
 2302

<210> 3846
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 3846

Ser	Cys	Lys	Gly	Asn	His	Ala	Lys	Glu	Ala	Gly	Cys	Thr	Ile	Arg	Ala
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Cys	Arg	Ala	Gly	Leu	Trp	Gly	Pro	Ala	Asp	Pro	Ser	Ser	Gln	Asn	Gln
						20			25				30		
Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Glu	
						35			40				45		
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly
						50			55				60		
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	
						65			70				75		80
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly
						85			90				95		
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
						100			105				110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
						115			120				125		
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
						130			135				140		
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg
						145			150				155		160
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly
						165			170				175		
Ala	Gly	Arg	Arg	Leu	Gln	Ala	Asp	Thr	Gly	Ala	Phe	Ser	Pro	Pro	Asp